

## **Invertebrates of Montana**

## **Montana Field Guide**

**Note**These PDF versions of the Montana Field Guide are intended to assist in offline identification and field work. They are not intended to replace the live Field Guide, as that version contains more information and is updated daily.

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For the most up to date information of Montana species, please visit http://FieldGuide.mt.gov

# Sleepy Orange - Abaeis nicippe http://FieldGuide.mt.gov/detail\_IILEPB4110.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



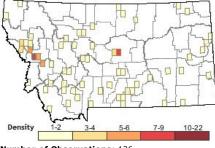
## A Mayfly - Acentrella insignificans

http://FieldGuide.mt.gov/detail\_IIEPH59030.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 136

#### **General Description**

The genus, Acentrella are small mayflies (blue-winged olives) that are common in medium-large cool-water systems such as the Missouri and Yellowstone Rivers, but can also appear in smaller, cold-water trout streams that have some siltation and dewatering problems, as this genera is more silt-tolerant than some other mayflies.

#### Habitat .

Acentrella mayflies are common in medium-large cool-water systems such as the Missouri and Yellowstone Rivers, but can also appear in cold-water trout streams that have some siltation and dewatering problems, as this genera is more silt-tolerant than some other mayflies.

## A Mayfly - Acentrella parvula

http://FieldGuide.mt.gov/detail\_IIEPH59060.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

The genus, Acentrella are small mayflies (blue-winged olives) that are common in medium-large cool-water systems such as the Missouri and Yellowstone Rivers, but can also appear in smaller, cold-water trout streams that have some siltation and dewatering problems, as this genera is more silt-tolerant than some other mayflies.

#### Habitat .

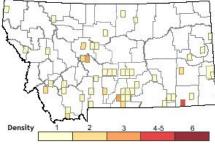
Acentrella mayflies are common in medium-large cool-water systems such as the Missouri and Yellowstone Rivers, but can also appear in cold-water trout streams that have some siltation and dewatering problems, as this genera is more silt-tolerant than some other mayflies.

## A Mayfly - Acentrella turbida

http://FieldGuide.mt.gov/detail\_IIEPH59010.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 64

#### **General Description**

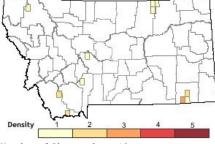
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#### Habitat

Acentrella mayflies are common in medium-large cool-water systems such as the Missouri and Yellowstone Rivers, but can also appear in cold-water trout streams that have some siltation and dewatering problems, as this genera is more silt-tolerant than some other mayflies.

# A Mayfly - Acerpenna pygmaea http://FieldGuide.mt.gov/detail\_IIEPH51020.aspx





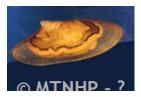
 $\textbf{Number of Observations} \colon 16$ 

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### Rocky Mountain Capshell - Acroloxus coloradensis

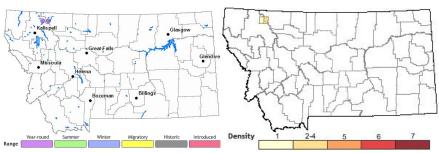
http://FieldGuide.mt.gov/detail\_IMGASK8010.aspx



#### **Species of Concern**

Global Rank: G3 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 5

#### Habita

Habitat is high-altitude lakes and ponds. In Colorado, it is typically found at elevations between 2675 and 3025 m and glacial deposits along at least part of shorelines. Rocky substrates, small drainage basins (< 250 ha), and macrophytic vegetation are often (but not always) associated (Riebesell et al., 2001). Most known populations occur in lakes, but a recent discovery occurred in a very slowly-moving portion of Beaver River in Alberta, Canada (Paul and Clifford, 1991). In Montana it has been reported in a high mountain lake (Lost Lake) within a small drainage basin (< 250 ha), on cobble-gravel substrate. Densities in Lost Lake, Montana, were highest where flat rocks were piled in layers in relatively shallow water (<1 m) and where the area was not utilized by people for wading and swimming (Ellis et al., 2004). It is an extreme environmental specialist to small alpine lakes only. Macrophytes are generally rare; and the species appears to be a stenothermal lithophile (Paul and Clifford 1991). Its trophic status is primarily a grazer and secondarily a scraper of algae or diatoms (Clarke 1981). In a study of comparative habitat, Riebessell et al. (2001) found lakes with A. coloradensis were significantly lower in elevation (2864 m versus 3074 m) than lakes without the species [but higher in elevation than lakes with other snail species had higher calcium content (104 mg per L versus 49 mg per L), and higher in conductivity (39 µ cm versus 24 µ per cm) than lakes without A. coloradensis. This indicates the species may be limited to lakes in an elevation band low enough to have enough calcium and other ions, but high enough to have enough to have enough calcium and other ions, but high enough to have enough so runoff, such as is seen commonly at lower elevations).

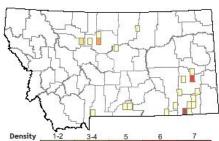
## **Common Stone - Acroneuria abnormis**

http://FieldGuide.mt.gov/detail\_IIPLE1L010.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 48

#### **General Description**

This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams. This is our most tolerant species in the family Perlidae able to live in the warmer waters of eastern Montana streams including the Tongue and Powder Rivers and lower Yellowstone.

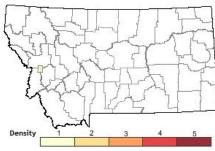
# A Millipede - Adrityla cucullata http://FieldGuide.mt.gov/detail\_ITUNI93010.aspx



#### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# An Aedes Mosquito - *Aedes cinereus* http://FieldGuide.mt.gov/detail\_IIDIP7H090.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# An Aedes Mosquito - *Aedes vexans* http://FieldGuide.mt.gov/detail\_IIDIP7H170.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

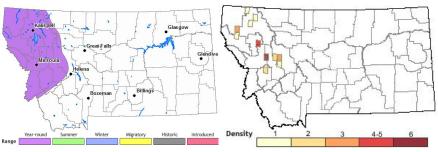
#### Canada Darner - Aeshna canadensis

http://FieldGuide.mt.gov/detail\_IIODO14020.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 26

#### **General Description**

The Canada Darner is a member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" (57-120 mm) long. These brilliant blue, green, or brown insects have large, clear wings spanning up to 5 7/8". Their compound eyes meet on top of the head. The female hovers above water usually attached or guarded by the male and, using a well-developed ovipositor for slicing into emergent plants, thrusts eggs one at a time in the stems. Preferred habitat includes wooded lakes and ponds with abundant vegetation, as well as marshy and boggy lakes, fens, and slow sluggish streams often associated with beaver ponds. Wetland systems: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen.

#### Habitat

Canada Darners (Aeshna canadensis) prefer wooded lakes and ponds with abundant vegetation, as well as marshy and boggy lakes, fens, and slow sluggish streams often associated with beaver ponds (Dunkle 2000, Nikula et al. 2002, Paulson 2009). Away from breeding sites, Canada Darners often perch vertically on branches or tree trunks. They feed at forest edges, over clearings, open fields, and pastures and are often encountered in swarms (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

#### Lance-tipped Darner - Aeshna constricta

http://FieldGuide.mt.gov/detail\_IIODO14040.aspx



# © Nate Kohler (Glargow Heieno Bozeman Blings

 $\textbf{Number of Observations} \colon 30$ 

#### **General Description**

The Lance-tipped Darner is a member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" (57-120 mm) long. These brilliant blue, green, or brown insects have large, clear wings spanning up to 5 7/8". Their compound eyes meet on top of the head. The female hovers above water usually attached or guarded by the male and, using a well-developed ovipositor for slicing into emergent plants, thrusts eggs one at a time in the stems. Preferred habitat includes open, shallow marshy ponds, including some that are temporary, as well as the edges of larger open lakes, bogs, and slow streams. Wetland systems: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen, Great Plains Open Freshwater Depressional Wetland, Great Plains Prairie Pothole

#### Habitat

Lance-tipped Darners inhabit open, shallow marshy ponds, including some that are temporary, as well as the edges of larger open lakes, bogs, and slow streams. Many of the ponds selected for breeding dry up during the year (Dunkle 2000, Paulson 2009). They hunt, often in swarms, over marshes and fields and tend to perch vertically on low vegetation and shrubs, but will also perch on trees and branches (Dunkle 2000, Paulson 2009).

#### **Potential Species of Concern**

Global Rank: G5 State Rank: S1S3

AGENCY STATUS

USFWS: USFS: BLM:

#### Lake Darner - Aeshna eremita

http://FieldGuide.mt.gov/detail\_IIODO14060.aspx

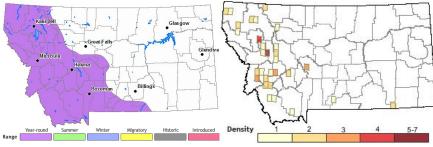


#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S4

AGENCY STATUS USFWS:

USFWS: USFS: BLM:



**Number of Observations**: 56

#### General Description

The Lake Darner is a member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" long. These brilliant blue, green, or brown insects have large, clear wings spanning up to 5 7/8". Their compound eyes meet on top of the head. The female hovers above water usually attached or guarded by the male and, using a well-developed ovipositor for slicing into emergent plants, thrusts eggs one at a time in the stems. Preferred habitatprefer sparsely vegetated or woody lakes and ponds, as well as marshes, fens, bogs and slow-flowing streams. Wetland systems: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen.

#### Habitat \_

Lake Darners prefer sparsely vegetated or woody lakes and ponds, as well as marshes, fens, bogs and slow-flowing streams. They feed at forest openings and will perch on trees, branches and sometimes on the ground (Dunkle 2000, Paulson 2009).

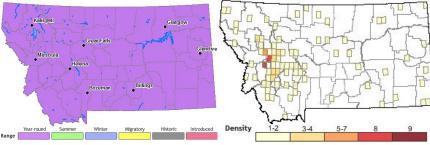
#### Variable Darner - Aeshna interrupta

http://FieldGuide.mt.gov/detail\_IIODO14070.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 141

#### General Description

The Variable Darner is a member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" (57-120 mm) long. Variable Darners are found state-wide from the mountains to the prairies. Preferred habitat includes a variety of lakes and ponds with dense shoreline vegetation, marshy or boggy ponds, fens, and saline ponds, as well as slow-moving streams (Nikula et al. 2002, Paulson 2009, Dunkle 2000). Associated Wetland ecological systems are numerous: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen, Great Plains Open Freshwater Depressional Wetland, Great Plains Prairie Pothole, and potentially the Great Plains Saline Depression Wetland since these dragons can tolerate saline conditions.

#### Habitat

Variable Darners are found in many habitats, including a variety of lakes and ponds with dense shoreline vegetation, marshy or boggy ponds, fens, and saline ponds, as well as slow-moving streams (Dunkle 2000, Nikula et al. 2002, Paulson 2009). Away from breeding sites, Variable Darners can be found feeding, sometimes in very large swarms, in mountains clearings, open fields, and along roads. This species often perches vertically on tree trunks, branches, other available vegetation, and sometimes on rocks and the ground (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

## Sedge Darner - Aeshna juncea

http://FieldGuide.mt.gov/detail\_IIODO14080.aspx

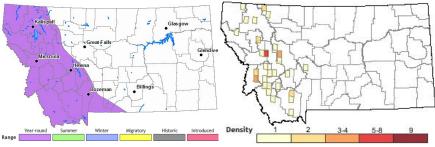


#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

AGENCY STATUS

USFWS: USFS: BLM:



Number of Observations: 45

#### **General Description**

The Sedge Darner is a a fairly uncommonly occurring member of the family Aeshnidae in Montana, and a potential species of concern. Darners are among the largest and fastest-flying North American dragonflies. This is a pale species, bluish areas being ampler than in most other Aeschnas. Face greenish blue, more or less overspread with brownish except on sides of the frons and facial lobes of postclypeus. Black crossbands on fronto-clypeal suture and on both front and rear margins of labrum. Black T spot above has an ill-defined front margin; its stalk is widened to its confluence with black of vertex. Top of vertical tubercle broadly yellow, occiput obscurely so. All pale stripes of thorax broad and all carinae narrowly black. Two stripes on front broadly widened laterally under crest. Between the two on each side, a short intervening half stripe terminates wide at top and tapers to a point halfway down toward spiracle. Legs brown, paler basally. Wings dull hyaline, with tawny costa and stigma. Cells in fork of radial sector and on both radial and median planates rather more numerous and irregular than is usual in Aeschna. Abdomen brown, broadly marked with blue; black on all carinae and on joinings of middle segments. Two swollen basal segments have a middorsal yellow line; sides of 2 streaked with brown and yellow, and all yellow below auricle in male. Each auricle armed with four minute teeth. Segment 3 moderately constricted. Darkening segments beyond 3 have usual spots larger than in other species, postero-dorsal one increasing markedly to rearward, covering most of depressed dorsum of 10. Mid-dorsal tubercle of 10 low and erect. The nymphs of Aeschna are among the most graceful of odonate nymphs, streamlined of body and neatly patterned in markings of green and brown that tend to run in longitudinal bands when among the green stems of water plants, in camouflage. The lead is a little flattened. The legs are slender and pale, usually ornamented with rings of brown or of lighter and darker greens. The abdome

#### Habitat

Sedge Darners occupy ponds, lakes, pools, bays, and marshes with extensive sedge vegetation, as well as mossy fens, semipermanent ponds, ditches with emergent vegetation, and quiet stream portions in forested areas (Dunkle 2000, Paulson 2009). This species is known to hunt on and around tree trunks late into evening (Dunkle 2000).

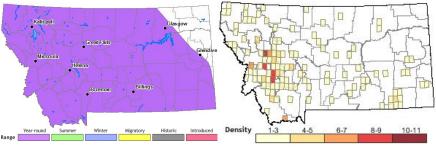
#### Paddle-tailed Darner - Aeshna palmata

http://FieldGuide.mt.gov/detail\_IIODO14120.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 256

#### **General Description**

The Paddle-tailed Darner is a member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" (57-120 mm) long. Paddle-tailed Darners are found state wide from the mountians to the prairies. Preferred habitat includes a variety of lakes and ponds with dense shoreline vegetation, marshy or boggy ponds, fens, and saline ponds, as well as slow-moving streams (Nikula et al. 2002, Paulson 2009, Dunkle 2000). Associated Wetland ecological systems are numerous: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen, Great Plains Open Freshwater Depressional Wetland, Great Plains Prairie Pothole, and potentially the Great Plains Saline Depression Wetland since these dragons can tolerate saline conditions.

#### Habitat

Paddle-tailed Darners habitats include shaded lakes, ponds, and slow-flowing streams usually in forested areas, but they can also be found in more arid regions. Bogs and fens are also used as breeding sites (Dunkle 2000, Paulson 2009). Away from water, this species tends to hunt along thicket edges until evening (Dunkle 2000).

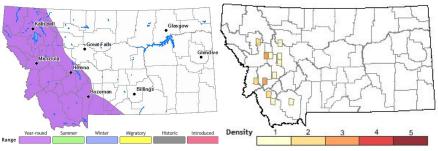
#### Zigzag Darner - Aeshna sitchensis

http://FieldGuide.mt.gov/detail\_IIODO14160.aspx



#### Potential Species of Concern Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



#### $\textbf{Number of Observations} \colon 19$

#### **General Description**

The Zigzag Darner is a relatively small, fairly uncommonly occurring member of the family Aeshnidae in Montana and a potential species of concern. Preferred habitat includes small bog pools with little to no emergent vegetation as well as fens and other shallow cold water pools with some moss cover and nearby wooded uplands. Many breeding sites chosen by this species dry up during the summer months (Dunkle 2000, Paulson 2009). The zigzg darner is distinctive with its zigzag thoracic stripes and a brown abdomen with pale blue spots.

#### Habitat

Zigzag Darners prefer small bog pools with little to no emergent vegetation as well as fens and other shallow cold water pools with some moss cover and nearby wooded uplands. Many breeding sites chosen by this species dry up during the summer months (Dunkle 2000, Paulson 2009). Away from breeding sites this species can often be found perching on light-colored substrates located on the ground, on logs and trees in the nearby wooded uplands or in open clearings and logging roads. Although males mostly feed at breeding sites, both sexes also feed away from the water, but not late into the evening or swarms (Dunkle 2000 Paulson 2009). They have also been observed in wet meadows (Miller and Gustafson 1996).

## Subarctic Darner - Aeshna subarctica

http://FieldGuide.mt.gov/detail\_IIODO14170.aspx

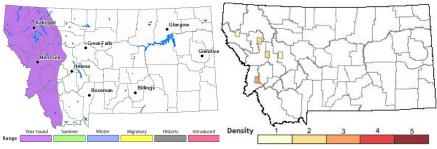


#### **Species of Concern**

Global Rank: G5 State Rank: S1S2

AGENCY STATUS USFWS: USFS:

BLM:



#### Number of Observations: 9

#### **General Description**

The Subarctic Darner is circumboreal in its distribution, but is a fairly uncommonly occurring member of the family Aeshnidae found in isolated mountainous regions of Montana and is a species of concern. Darners are among the largest and fastest-flying North American dragonflies. Preferred breeding habitat of the Subarctic Darner is in swamps, fens, and bog ponds with a clear vegetative edge of abundant sphagnum and other mosses (Dunkle 2000, Paulson 2009). Similar to the Sedge Darner with black face line present, but lateral thoracic stripes are bent forward and have 2 narrow yellow spots present between the stripes.

The Subartic Darner breeds in swamps, fens, and bog ponds with a clear vegetative edge of abundant sphagnum and other mosses (Dunkle 2000, Paulson 2009).

## Black-tipped Darner - Aeshna tuberculifera

http://FieldGuide.mt.gov/detail\_IIODO14180.aspx

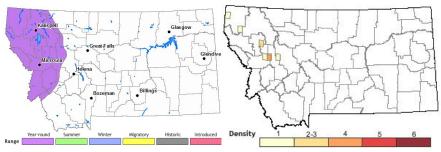


#### **Potential Species of Concern**

Global Rank: G4 State Rank: S2S4

AGENCY STATUS USFWS:

USFWS: USFS: BLM:



#### Number of Observations: 11

#### **General Description**

The Black-tipped Darner is a relatively uncommonly occurring member of the family Aeshnidae in western Montana, and a potential species of concern. Preferred habitat and breeding sites include clear lakes and ponds often with acid, boggy vegetation in forested regions, as well as some vegetated streams (Dunkle 2000, Paulson 2009). The Black-tipped Darner is distinctive with no face line, and its lateral thoracic stripes broad straight, yellow-white to pale blue, S10 is Black most other mosaic darners with straight thoracic stripes have a pale spot on S10. Associated Wetland ecological systems are: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen.

#### Habitat

Black-tipped Darner breeding sites include clear lakes and ponds often with acid, boggy vegetation in forested regions, as well as some vegetated streams (Dunkle 2000, Paulson 2009). Away from water, this species forages along forest openings and edges and tends to perch on saplings (Dunkle 2000).

#### Shadow Darner - Aeshna umbrosa

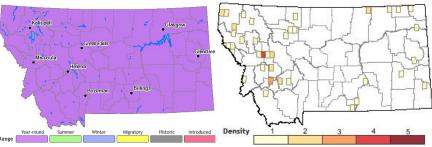
http://FieldGuide.mt.gov/detail\_IIODO14190.aspx



Global Rank: G5 State Rank: S4S5

**AGENCY STATUS** USFWS: USFS:

BLM:



#### Number of Observations: 48

#### **General Description**

The Shadow Darner is a common and widespread member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" (57-120 mm) long. Shadow Darners are found state wide from the mountians to the prairies with a subspecies in the east and in the western part of the state. Preferred habitat includes small slow-flowing forested streams, as well as shaded lakes, ponds, bogs, fens, swamps and ditches (Nikula et al. 2002, Paulson 2009, Dunkle 2000). In eastern Montana shaded riparian areas are probably key for this species to be present. Of the wedge shaded cerci darners with straight thoracic stripes, the shadow darner is more brown in color and narrower T-stripes, no face line, eastern form with small green abdominal spots, while western form has larger blue abdominal spots. Associated Wetland and Lotic ecological systems are numerous: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen, Great Plains Open Freshwater Depressional Wetland, Perennial Praire Streams.

#### Habitat

Shadow Darners occupy small slow-flowing forested streams, as well as shaded lakes, ponds, bogs, fens, swamps and ditches (Dunkle 2000, Nikula et al. 2002, Paulson, 2009). This species is also found far from water in clearings, forest edges, and forested roads (Nikula et al. 2002).

## An Agapetus Caddisfly - Agapetus montanus

http://FieldGuide.mt.gov/detail\_IITRI33040.aspx

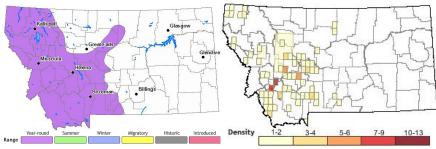


#### **Potential Species of Concern**

Global Rank: G3 State Rank: S3

AGENCY STATUS USFWS:

USFWS: USFS: BLM:



Number of Observations: 136

#### Habitat

The larvae of A. montanus occur on the upper surfaces and sides of cobbles and boulders in moderate gradient, fast flowing, foothills to mountain streams (Wiggins1996). This genus inhabits streams with more intermediate characteristics between the higher elevation, cold mountain streams (more likely to find Glossosoma & Anagapetus), and the large warmer transitional rivers downstream (more likely to find Prototila) (Wiggins 1996). Generally the riparian canopy of the occupied streams is mostly (>50%) open, and less shaded than mountain streams. In clear streams and rivers during low flows, it is typical to be able to locate & identify Agapetus larvae on the tops of rocks. In relation to trophic status, A. montanus larvae scrape, graze and digest algae and diatoms from the surfaces of rocks (Merritt and Cummins 1996).

## A True Fly - Agathon comstocki

http://FieldGuide.mt.gov/detail\_IIDIP46020.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A True Fly - Agathon markii http://FieldGuide.mt.gov/detail\_IIDIP46030.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

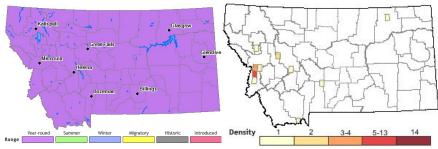
## Milbert's Tortoiseshell - Aglais milberti

http://FieldGuide.mt.gov/detail\_IILEPK6040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 26$ 

#### **General Description**

The Milbert's Tortoiseshell (Aglais milbert) forewing tip is squared-off. The upperside is black with a wide orange submarginal band which grades to yellow at the inner edge of band. There is a narrow black marginal border on both wings, and the hindwing border may contain some blue spots. The wing span is about 42 - 63 mm (Opler et al. 2010).

#### Habitat

Wet areas near woodlands, moist pastures, marshes (Opler et al. 2010).

## A Caddisfly - Agraylea multipunctata

http://FieldGuide.mt.gov/detail\_IITRIA9010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

Habitat

Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.

## A Caddisfly - Agraylea saltesea

http://FieldGuide.mt.gov/detail\_IITRI63690.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

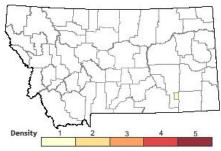
#### Habitat

Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.

## A Noctuid Moth - Agrochola purpurea

http://FieldGuide.mt.gov/detail\_IILEYFR010.aspx





#### Number of Observations: 1

#### **General Description**

The adult Agrochola purpurea forewing is variably light purplish-brown to reddish-orange. The forewing lines and markings are faint except for the dark sub-apical dash along the costa and the black lower half of reniform spot. The subterminal line is a series of black dots. The terminal line is either continuous and scalloped or broken into dark dots. The grayish V-shaped median line descends in the middle to the reniform spot. The AM and PM lines are brown, double, and wavy. The orbicular and reniform spots are rimmed with brown. The hindwing is pale yellowish with gray shading. The wingspan is about 36 mm.

#### Habitat .

Agrochola purpurea occurs in dry western forests.

Global Rank: GNR State Rank: SNR

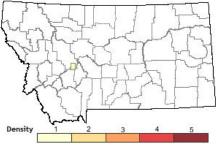
AGENCY STATUS USFWS: USFS:

BLM:

## Vancouver Dart - Agrotis vancouverensis

http://FieldGuide.mt.gov/detail\_IILEYKL120.aspx





#### Number of Observations: $\boldsymbol{1}$

#### **General Description**

The Vancouver Dart (Agrotis vancouverensis) is a medium size moth (forewing length about 33 mm) with light and dark reddish brown forewings. The subterminal area in particular is usually lighter brown, and is crossed by poorly defined jagged light and dark lines. The orbicular and reniform spots are well defined, with the area before and between them blackish. The basal dash-claviform spot is prominent and filled with black scales. The hind wings are brown (LaFontaine 1987).

The larvae are gray with a diffuse dark oval or diamond-shaped patch on the dorsum of each segment. There is a dark gray sub-dorsal line with dark gray shading speckled with white along the sides. The spiracles and cervical shield are black. The head is closely infuscated with black, including both submedian arcs, and a close reticulate pattern (Powell and Opler 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

# A Caddisfly - Agrypnia colorata http://FieldGuide.mt.gov/detail\_IITRI52030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Agrypnia glacialis http://FieldGuide.mt.gov/detail\_IITRI65630.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Agrypnia improba http://FieldGuide.mt.gov/detail\_IITRI52020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Agrypnia obsoleta http://FieldGuide.mt.gov/detail\_IITRI65650.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Agrypnia straminea http://FieldGuide.mt.gov/detail\_IITRI65680.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Large Caddisfly - Agrypnia vestita http://FieldGuide.mt.gov/detail\_IITRI52010.aspx



Global Rank: G5 State Rank: SNR

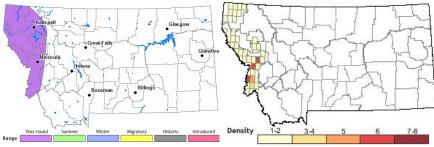
AGENCY STATUS USFWS: USFS: BLM:

# Idaho Forestsnail - *Allogona ptychophora* <a href="http://FieldGuide.mt.gov/detail\_IMGAS91030.aspx">http://FieldGuide.mt.gov/detail\_IMGAS91030.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 79$ 

# A Caddisfly - Allomyia bifosa http://FieldGuide.mt.gov/detail\_IITRIC6030.aspx



Number of Observations: 0

Small foothills and mountain streams.

Global Rank: G3G4 State Rank: SNR

# A Caddisfly - Allomyia cascadis http://FieldGuide.mt.gov/detail\_IITRI66030.aspx



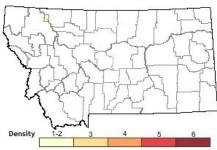
Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Allomyia hector http://FieldGuide.mt.gov/detail\_IITRIC6070.aspx



Global Rank: G1G2 State Rank: SNR



Number of Observations: 2

# A Caddisfly - Allomyia tripunctata http://FieldGuide.mt.gov/detail\_IITRI66040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Delicate Sallfly - Alloperla delicata

http://FieldGuide.mt.gov/detail\_IIPLE11100.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

#### **General Description**

### Beartooth Sallfly - *Alloperla medveda* <a href="http://FieldGuide.mt.gov/detail\_IIPLE11170.aspx">http://FieldGuide.mt.gov/detail\_IIPLE11170.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**

### Sawtooth Salifly - Alloperla serrata

http://FieldGuide.mt.gov/detail\_IIPLE11250.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

#### **General Description**

### Western Sallfly - Alloperla severa

http://FieldGuide.mt.gov/detail\_IIPLE11260.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**

# A Bark Beetle - *Alniphagus aspericollis* <a href="http://FieldGuide.mt.gov/detail\_IICOLZW010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZW010.aspx</a>



Global Rank: GNR State Rank: SU

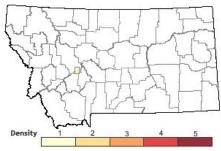
AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### Montana Six-plume Moth - Alucita montana

http://FieldGuide.mt.gov/detail\_IILEH02010.aspx





### Number of Observations: 1

The Montana Six-plume Moth (*Alucita montana*) is in the "many-plume moth" family *Alucitadae*. The "many-plume moths" are so called because the wings are deeply cleft to the basal forks of the veins, so each wing has six fringed plume-like segments. The adult Montana Six-plume Moth is small (forewing 5.5-6.5 mm), pale grey with faint, transverse banding of dark brown and tan, more distinct on the forewing, especially the costal edge. They are unmistakable by their wing structure. The Montana Six-plume Moth larvae has a stout body with short legs, and short setae on inconspicuous pinacula (Powell and Opler 2009).

Two new species of Alucita were described by Bernard and Jean-François Landry in 2004, bringing the North American species total to three. The Eurasian species, Twenty-plume Moth (Alucita hexadactyla), was previously thought to be the only species of Alucita in North America. Landry and Landry have since determined that the Twenty-plume Moth does not occur in North America (McLeod 2006).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### Langton's Forester - Alypia langtoni

http://FieldGuide.mt.gov/detail\_IILEYB7050.aspx



 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

Langton's Forester (*Alypia langtoni*) is the only explicitly sexually dimorphic species of *Alypia*. The male and female forewings are both black with two yellow-white patches. The yellow-white patches are slightly larger and more irregular in the female than the male. The male hindwing is black with a white basal region separated by a black bridge running through the discal area from a small, round other white patch. The basal white patch is streaked with black on the cubital and anal veins but most strongly on the anal vein. The size of the white patches in the male hindwing is variable and in some individuals the patches can be very small. The ventral hindwing pattern recapitulates the dorsal surface. The female hindwing is black with a single yellow patch in the distal part of the discal cell, although some rare specimens (particularly from California) have a small basal yellow patch as well. The wingspan is about 30 mm (Poole no date).

The larvae ground color is white with extensive black-brown markings. The setae are well developed and the pinaculae are large and black-brown. A large black-brown patch is present in the dorsal region of each abdominal segment. This large patch includes the pairs of setae D1 and D2. The black of this large patch runs downward into the region of the spiracle on either side of the abdomen. This large dorsal patch is followed on the caudal half of each segment by a much smaller triangular patch. This small triangular patch usually has a small yellow-white central area. The spiracle of each abdominal segment is surrounded by an irregular orange patch. This patch is enclosed on both sides by irregular black-brown lines running down from the large black-brown patch on the dorsal surface of each segment. Irregular black-brown patches and lines are found both caudal and cephalad to the central region of the segment. A series of yellow-white patches forms an irregular subspiracular line. A large white patch stretches from seta L1 on abdominal segment 7 to L2 on abdominal segment 8 (Poole no date).

#### Habitat .

Langton's Forester is widespread in the province of Alberta, and found throughout the wooded areas except in the grasslands (Anweiler 2008).

Global Rank: G5 State Rank: SNR

**AGENCY STATUS** 

USFWS: USFS: BLM:

# Oslar's Roadside-Skipper - *Amblyscirtes oslari* <a href="http://FieldGuide.mt.gov/detail\_IILEP80060.aspx">http://FieldGuide.mt.gov/detail\_IILEP80060.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



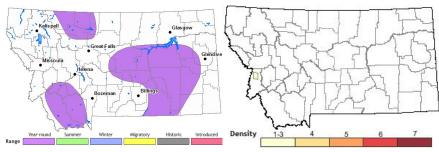
 $\textbf{Number of Observations} \colon 0$ 

# Common Roadside-Skipper - *Amblyscirtes vialis* http://FieldGuide.mt.gov/detail\_IILEP80180.aspx



Global Rank: G4 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

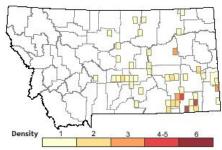


# Creeping Water Bug - Ambrysus mormon <a href="http://FieldGuide.mt.gov/detail\_IIHEM06010.aspx">http://FieldGuide.mt.gov/detail\_IIHEM06010.aspx</a>



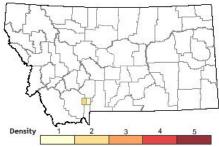
Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Ameletus bellulus http://FieldGuide.mt.gov/detail\_IIEPH15080.aspx



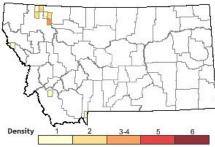


Number of Observations: 3

Global Rank: G3 State Rank: SNR

A Mayfly - Ameletus celer http://FieldGuide.mt.gov/detail\_IIEPH15100.aspx



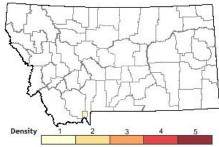


 $\textbf{Number of Observations} \colon 15$ 

Global Rank: G4 State Rank: SNR

A Mayfly - Ameletus cooki http://FieldGuide.mt.gov/detail\_IIEPH15110.aspx





Number of Observations:  ${\bf 1}$ 

Global Rank: G4 State Rank: SNR

# A Mayfly - Ameletus majusculus http://FieldGuide.mt.gov/detail\_IIEPH15180.aspx

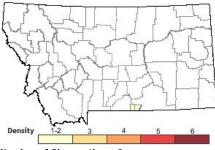


Number of Observations: 0

Global Rank: G3G4 State Rank: SNR

# A Mayfly - Ameletus oregonensis http://FieldGuide.mt.gov/detail\_IIEPH15190.aspx





Number of Observations: 2

Global Rank: G4 State Rank: SNR

# A Mayfly - Ameletus shepherdi http://FieldGuide.mt.gov/detail\_IIEPH15210.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

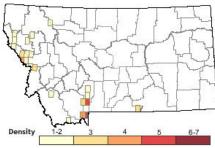
 $\textbf{Number of Observations} \colon 0$ 

# A Mayfly - Ameletus similior http://FieldGuide.mt.gov/detail\_IIEPH15220.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### A Mayfly - Ameletus sparsatus

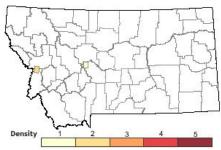
http://FieldGuide.mt.gov/detail\_IIEPH15230.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 3

#### **General Description**

This large swimming mayfly species is associated with medium to large sized, moderate gradient, cool-coldwater rivers (Intermontane River Aquatic Ecological System) with cobble riffles, some gravels and silted pool & side channel areas with aquatic vegetation areas.

### Habitat .

This species is associated with larger, moderately flowing rivers and streams (Jensen 1966). Zloty and Pritchard (1997) found larvae in third- or fourth-order streams that had abundant littoral vegetation. The trophic relationships of larvae of Ameletus spp. include scrapers and collectors-gatherers (detritus, diatoms) (Merritt and Cummins 1996).

# A Mayfly - Ameletus suffusus http://FieldGuide.mt.gov/detail\_IIEPH15250.aspx



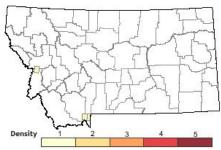
Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - Ameletus velox http://FieldGuide.mt.gov/detail\_IIEPH15300.aspx



Global Rank: G4 State Rank: SNR

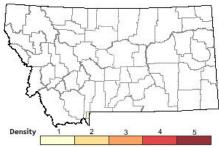


Number of Observations: 3

# A Mayfly - Ameletus vernalis http://FieldGuide.mt.gov/detail\_IIEPH15310.aspx

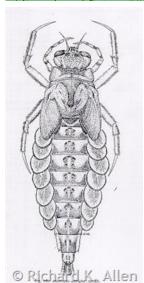


Global Rank: G3G4 State Rank: SNR



Number of Observations: 1

# A Mayfly - Ametropus ammophilus http://FieldGuide.mt.gov/detail\_IIEPH57030.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

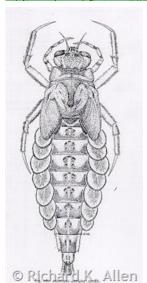
Number of Observations: 0

Habitat

This species is associated with larger, perennially flowing warm-water rivers with sand-gravel dominated bottoms with cobble riffles

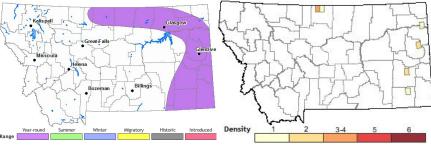
### A Mayfly - Ametropus neavei

http://FieldGuide.mt.gov/detail\_IIEPH57010.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 11

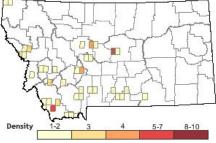
### General Description

### Habitat .

This species highly associated with larger, perennially flowing prairie rivers with gravel-cobble riffles and shifting sandy bottom runs and pools.

# A Caddisfly - Amiocentrus aspilus http://FieldGuide.mt.gov/detail\_IITRI66160.aspx





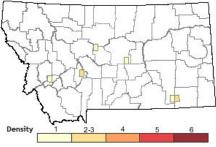
Number of Observations: 74

Global Rank: G5 State Rank: SNR

### Mud Amnicola - Amnicola limosa

http://FieldGuide.mt.gov/detail\_IMGASF4070.aspx





 $\textbf{Number of Observations} \colon 10$ 

### **General Description**

Amnicola is a genus of very small freshwater snails that have an operculum which can seal the interior soft tissues of the shell from the environment. Length is typically only a few millimeters (mm). They can be fairly tolerant of warm water and low oxygen conditions. Generally shell color is tan to light brown.

#### Habitat .

Freshwater. Populations are typically found in lentic environments, but can be commonly collected in slow-moving rivers, often on woody debris.

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### Lake Amnicola - Amnicola sp. 1

http://FieldGuide.mt.gov/detail\_IMGASF4190.aspx



Global Rank: G1 State Rank: S1 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**.

This is a small, tan-brown colored, operulate snail in the Hydrobiid family; it was formerly called the Washington duskysnail, now Lake Amnicola is the accepted nomenclature despite not being formerly described. Shell reaches a height of 5.0mm, is ovate-conic, has well rounded whorls (4-5 in adult), and a small umbilicus (Frest and Johannes, 1995).

### Habitat .

Freshwater. Lakes and lentic ecological systems.

### Western Red Damsel - Amphiagrion abbreviatum

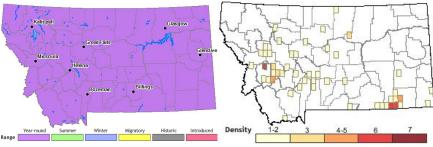
http://FieldGuide.mt.gov/detail\_IIODO77020.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 86

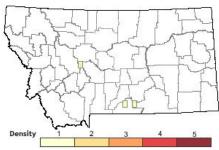
Western Red Damsels can be common in scattered localities at low and mid elevations of Montana. This damselfly lives in marshy places with plenty of grasses and sedges: shallow ponds, sloughs, spring-fed pools and slow streams; the Eleocharis palustris site association is typical, as well as other spikerushes and cattails. Adults fly close to the ground and perch frequently in low vegetation. Associated Wetland ecological systems are: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool and the Rocky Mountain Subalpine-Montane Fen. North American Arid West Emergent Marsh, Northwestern Great Plains Perennial Spring.

Western Red Damsels inhabit small slow-flowing forested streams, springs and seeps at the margins of shaded lakes, ponds, and swamps, as well as marshes and sloughs usually with a hard substrate (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009). Although this species tends to stay close to breeding sites, they can also be located in more open clearings and meadows where they forage (Paulson 2009).

# A Caddisfly - Amphicosmoecus canax http://FieldGuide.mt.gov/detail\_IITRI64490.aspx



Global Rank: G5 State Rank: SNR

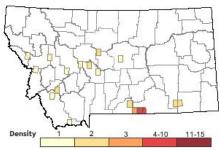


Number of Observations: 3

# Rockies Forestfly - Amphinemura banksi http://FieldGuide.mt.gov/detail\_IIPLE0H020.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 49

# A Riffle Beetle - Ampumixis dispar <a href="http://FieldGuide.mt.gov/detail\_IICOL7K010.aspx">http://FieldGuide.mt.gov/detail\_IICOL7K010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Caddisfly - Anabolia bimaculata

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRIA8020.aspx}}$ 



Global Rank: G5 State Rank: SNR

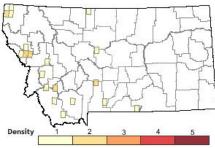
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Anagapetus debilis http://FieldGuide.mt.gov/detail\_IITRI66240.aspx



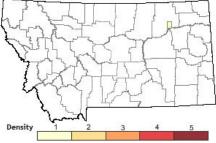
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Celery Looper Moth - Anagrapha falcifera <a href="http://FieldGuide.mt.gov/detail\_IILEY8S010.aspx">http://FieldGuide.mt.gov/detail\_IILEY8S010.aspx</a>





Number of Observations: 1

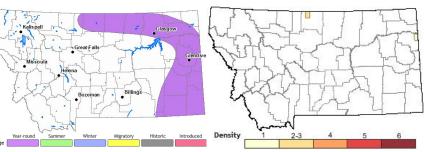
Global Rank: G5 State Rank: SNR

## A Sand-dwelling Mayfly - Analetris eximia

http://FieldGuide.mt.gov/detail\_IIEPH76010.aspx



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Number of Observations: 4

## **General Description**

This swimmer (body-type) mayfly is an inhabitant of large warmwater rivers with shifting sand and gravel substrates. This species is one of the few known predaceous mayflies; they act like tiger beetles on underwater sand bars chasing down prey items, especially chironomids.

## Habitat .

This species is associated with larger, perennially flowing prairie rivers with shifting sand-gravel dominated bottoms with cobble riffles

## **Potential Species of Concern**

Global Rank: G3 State Rank: S3

# **Delaware Skipper -** *Anatrytone logan* <a href="http://FieldGuide.mt.gov/detail\_IILEP70060.aspx">http://FieldGuide.mt.gov/detail\_IILEP70060.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



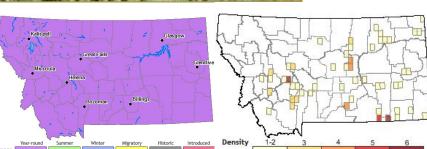
## Common Green Darner - Anax junius

http://FieldGuide.mt.gov/detail\_IIODO15020.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 101

### **General Description**

The Green Darner is a common and widespread member of the family Aeshnidae. Darners are among the largest and fastest-flying North American dragonflies, 2 1/4-4 3/4" (57-120 mm) long. Green Darners are found state-wide from the mountians to the prairies with a subspecies in the east and in the western part of the state. Due to the Common Green Darner's highly migratory nature, they can also be seen in a wide variety of non-wetland habitats as well. Green Darners inhabit a variety of well-vegetated lakes, ponds, marshes, and vernal pools, some temporary or even brackish, as well as small streams. This species prefers habitats that lack fish (Nikula et al. 2002, Paulson 2009, Dunkle 2000). Of the darners in Montana, the only one with a fully green thorax and a blue striped abdomen. Associated Wetland Ecological Systems: Western Emergent Marsh, Northern Rocky Mountain Wooded Vernal Pool, Great Plains Open Freshwater Depressional Wetland, Perennial Praire Streams.

### Habitat

Common Green Darners inhabit a variety of well-vegetated lakes, ponds, marshes, and vernal pools, some temporary or even brackish, as well as small streams. This species prefers habitats that lack fish. Due to the Common Green Darner's highly migratory nature, they can also be seen in a wide variety of non-wetland habitats as well (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

# Common Least Skipper - *Ancyloxypha numitor* <a href="http://FieldGuide.mt.gov/detail\_IILEP56010.aspx">http://FieldGuide.mt.gov/detail\_IILEP56010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Sand-dwelling Mayfly - Anepeorus rusticus

http://FieldGuide.mt.gov/detail\_IIEPH19020.aspx



### **Species of Concern**

Global Rank: G2 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 7

### **General Description**

This predaceous, little 2-tailed mayfly species (most mayflies have 3 tails) prefers large, warmwater sandy rivers in the prairie regions of Saskatchewan and the Western Prairie States. It is an indicator species of a largely intact Large Prairie River Ecological System that is being lost in North America. It is fairly unique in the Mayfly order by being predaceous, most mayfly species are herbivorous feeders on algae, diatoms and other plant materials. It "runs" along underwater sandbars searching for prey in a similar fashion to tiger beetles on terrestrial sandbars. It is a rare and uncommonly collected mayfly because of it's fast swimming ability and the use of the river current to escape. Acanthomola pubescens is a synonym of Anepeorus rusticus (Wang and McCafferty 2004).

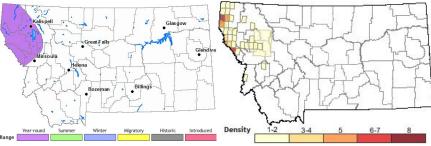
### Habitat .

This species is associated with larger, perennially flowing prairie rivers with sand-dominated bottoms (shifting sandbars) and cobble riffles.

# Banded Tigersnail - Anguispira kochi http://FieldGuide.mt.gov/detail\_IMGAS53070.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



# An Anopheles Mosquito - Anopheles earlei <a href="http://FieldGuide.mt.gov/detail\_IIDIP31020.aspx">http://FieldGuide.mt.gov/detail\_IIDIP31020.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# An Anopheles Mosquito - *Anopheles punctipennis* <a href="http://FieldGuide.mt.gov/detail\_IIDIP31010.aspx">http://FieldGuide.mt.gov/detail\_IIDIP31010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

## Polyphemus Moth - Antheraea polyphemus

http://FieldGuide.mt.gov/detail\_IILEW0S010.aspx



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## $\textbf{Number of Observations} \colon 3$

## **General Description**

The upperside of the Polyphemus Moth (*Antheraea polyphemus*) is reddish to yellowish brown. The forewing margin is usually lighter than the basal area. The forewing submarginal line is pink, or black and pink. The clear oval eyespots are ringed with yellow, blue, and black. The hindwing eyespot is separated from the basal area of the wing by a thin pink line. The underside has rust, brown, and pink markings (Opler, Lotts, and Naberhaus 2010). The wing span is about 100 - 150 mm (Schmidt and Robinson no date).

## Habitat .

Density

Deciduous hardwood forests, urban areas, orchards, and wetlands (Opler et al. 2010).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

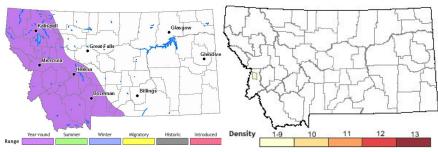
BLM:

# Pacific Orangetip - Anthocharis sara http://FieldGuide.mt.gov/detail\_IILEPA6040.aspx



Global Rank: G5 State Rank: SNR

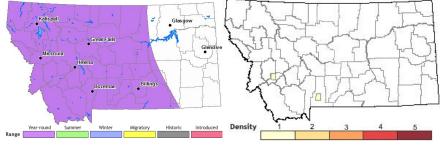
AGENCY STATUS USFWS: USFS: BLM:



# **Stella Orangetip -** *Anthocharis stella* <a href="http://FieldGuide.mt.gov/detail\_IILEPA6080.aspx">http://FieldGuide.mt.gov/detail\_IILEPA6080.aspx</a>



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Apatania barri http://FieldGuide.mt.gov/detail\_IITRI10040.aspx



Global Rank: GU State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Apatania chasica http://FieldGuide.mt.gov/detail\_IITRI10060.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Apatania comosa http://FieldGuide.mt.gov/detail\_IITRI10070.aspx



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

High gradient, high elevation smaller streams.

# A Caddisfly - Apatania shoshone http://FieldGuide.mt.gov/detail\_IITRI66090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Apatania zonella http://FieldGuide.mt.gov/detail\_IITRI66130.aspx



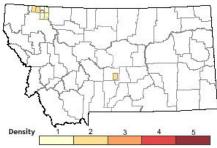
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Lance Aplexa - Aplexa elongata http://FieldGuide.mt.gov/detail\_IMGASL8010.aspx



Global Rank: G5 State Rank: SNR

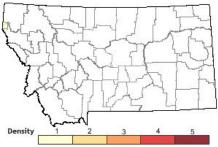


Number of Observations: 9

## St. John's Wort Inchworm - Aplocera plagiata

http://FieldGuide.mt.gov/detail\_IILEU77010.aspx





### Number of Observations: 1

### General Description

The Treble-bar moth (*Aplocera plagiata*) varies considerably in size (wingspan 30 - 38 mm). The forewing is brown to gray with triple lines containing faint cross-bars. The cross-bars give the appearance of sheet music (perhaps the origin of the common name "treble-bar"). The forewing has a dark apical dash with yellowish or orangish shading. The hindwing is pale gray with a tiny black discal spot (Chinery 1986 and Skinner 1984).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

The "inch worm-like" larvae develop through various stages and change from their initial light brown/tan and green color to darker brown with deep shading along their upper back and with dark stripes along their body. When they are fully mature, the larvae will measure 22 mm long (Harris 2003, Kelleher and Hulme 1984, Powell et al. 1994, Rees et al. 1996, and Manitoba Agriculture no date).

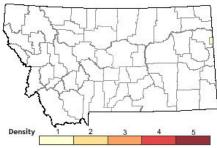
### Habita

The Treble-bar Moth is commonly associated with well drained soils in warm continental climate areas. Dry sites with rocky or sand-based soils and some limestone are suitable. Wet climates or moist soils are unsuitable (Harris 2003).

# A Mayfly - *Apobaetis etowah* http://FieldGuide.mt.gov/detail\_IIEPH25020.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 1

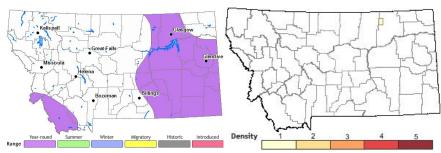
# Mormon Metalmark - Apodemia mormo http://FieldGuide.mt.gov/detail\_IILEPH7010.aspx



## **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations:  $\boldsymbol{1}$ 

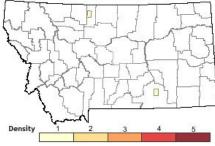
Habitat \_

Various arid lands

# **Great Spreadwing -** *Archilestes grandis*<a href="http://FieldGuide.mt.gov/detail\_IIOD075010.aspx">http://FieldGuide.mt.gov/detail\_IIOD075010.aspx</a>



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

# A Caddisfly - Arctopsyche grandis http://FieldGuide.mt.gov/detail\_IITRI66390.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 191$ 

Instream habitat: Hydropsychid larval populations can be very abundant in many Montana river aquatic communities. Larvae are restricted to moderate or fast flowing waters (very cold: Parapsyche--warmwater: Cheumatopsyche), living on cobbles/rocks, boulders or submerged logs

# Arctic Springfly - Arcynopteryx compacta <a href="http://FieldGuide.mt.gov/detail\_IIPLE25010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE25010.aspx</a>



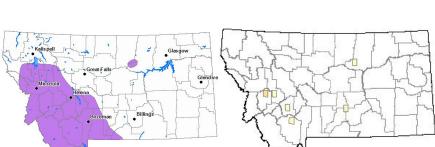
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Paiute Dancer - Argia alberta

http://FieldGuide.mt.gov/detail\_IIODO68120.aspx





Number of Observations: 12

### **General Description**

The small size (hindwing 16-20 mm, length of abdomen 22mm), predominantly dark coloration of the abdominal segments, and elongate, linear cerci distinguish this species from any other in the U.S. (Garrison, 1994; Kennedy, 1918).

Male -- Color: Labrum pale blue, the remainder of the face and head blue with an olive or, in some dried material, a violet cast. Under surface of head yellowish gray with a small black spot on each side of the occipital foramen. Clypeus edged with black. A wide bar through the paired ocelli and a broad, black stripe behind each postoccular area. Eyes dark blue, paler below. Prothorax black dorsally with a bluish spot on each side. Mesothoroax and metathorax dull blue (violet or brown in dried material) darker and duller on the dorsal surface and grayish on the sides. Middorsal stripe occupying one-third of the area between the humeral sutures. Humeral stripe half as wide as the mid-dorsal, it's upper third forked. A black line on the second lateral suture 1mm. wide. Pterostigmata brown subtended by one cell. Legs pale with blue on base of femora, broadly marked with black on the dorsal and anterior surfaces of the tibiae. Tarsi black. Abdomen with seg. 1-3 dull blue becoming duller or brownish on the lower sides. Seg. 1 with a baso-dorsal black spot. Seg. 2 with a narrow apical band and a lateral stripe black. Segs. 4-7 with the apical third and the dorsum black except a narrow basal band blue, the sides bluish or brownish. Segs 8-10 pure, pale blue, the lower edges more or less blotched with black. Superior appendages twice as long as wide when viewed from above, slender in profile. A prominent, internal, apical hook directed ventrad. Inferior appendages bifid, the lower ramus round or bluntly triangular directed caudad, superior lobe directed dorsad and terminating in an acute point.

Female.-- Color as in male but with the blue of the head and thorax paler. Eyes gray bluish above. Humeral stripe but half as wide as in the male, it's branches linear. Legs marked as in male but the black on the femora reduced somewhat. Abdomen brown with a narrow apical band on Segs. 2-6. Segs. 2-6 with an apical dorsal spot, a lateral stripe and an oblique spot on the lower apical angle of the side. Segs. 8-9 with dorsolateral stripe. Seg. 10 pale. In some females Seg. 6 is colored like 7. Mesostigmal laminae with no special modifications (Kennedy, 1918).

### Habitat

Paiute Dancers are associated with warm or hot-springs, as well as spring-fed marshes and sandy streams that flow from the springs. Vegetation is abundant and mostly sedges (Westfall and May 1996; Paulson 2009).

### **Potential Species of Concern**

Global Rank: G4 State Rank: S2S3

**AGENCY STATUS** 

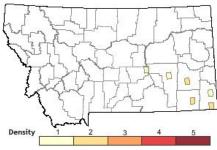
USFWS: USFS: BLM:

# Blue-fronted Dancer - Argia apicalis http://FieldGuide.mt.gov/detail\_IIODO68040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Emma's Dancer - Argia emma

http://FieldGuide.mt.gov/detail\_IIODO68150.aspx



### Number of Observations: 27

Emma's Dancers occur in rapid rocky mountain streams and moderate to large rivers with sandy or mud substrates and open or shrubby banks, as well as large lakes with open rocky shores in forested and open landscapes (Westfall and May 1996; Paulson 2009). Miller and Gustafson (1996) have reported them as abundant in cool springs as well.

Larvae Emma's Dancers are apparently difficult to collect as they occupy the entire streambed and are quick to scatter when disturbed (Kennedy 1915 in Westfall and May 1996).

## **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

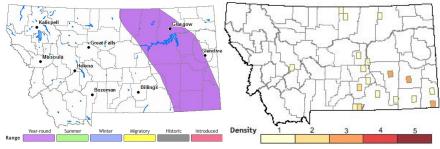
## Variable Dancer - Argia fumipennis

http://FieldGuide.mt.gov/detail\_IIODO68050.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 26

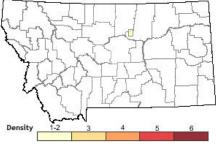
## Habitat

Vegetated streams and ponds as well as open sandy lakes are the prefered habitats of the Variable Dancer. They tend to occur commonly at riffles and within the vegetation along pools (Nikula et al. 2002, Paulson 2009).

# Kiowa Dancer - *Argia immunda* http://FieldGuide.mt.gov/detail\_IIODO68180.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



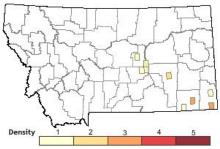
## Powdered Dancer - Argia moesta

http://FieldGuide.mt.gov/detail\_IIODO68060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 14$ 

### Habitat

Powdered Dancers are associated across their range with warm-water streams and rivers, and in MT southeastern sandy streams that flow across open country (Westfall and May 1996; Paulson 2009).

## Vivid Dancer - Argia vivida

http://FieldGuide.mt.gov/detail\_IIODO68290.aspx



### $\textbf{Number of Observations} \colon 40$

Vivid Dancer habitat includes vegetated spring-fed streams, seeps, and pools, as well as small streams with emergent vegetation and a riparian component, hot springs and irrigation canals with flow (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009). Habitats with sedge vegetation and rocks, as well as nearby woody vegetation are important for roost sites (Paulson 2009).

## **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

# Rehn's Slow Grasshopper - *Argiacris rehni* <a href="http://FieldGuide.mt.gov/detail\_IJORTB2040.aspx">http://FieldGuide.mt.gov/detail\_IJORTB2040.aspx</a>



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

## Horned Clubtail - Arigomphus cornutus

http://FieldGuide.mt.gov/detail\_IIOD081040.aspx



## $\textbf{Number of Observations} \colon 4$

## Habitat

The preferred habitat of the Horned Clubtail is permanent slow streams and rivers with vegetated edges as well as ponds and lakes (Dunkle 2000, Paulson 2009). In Montana, this species has so far only been collected from man-made reservoirs (Miller and Gustafson 1996). The Horned Clubtail also uses open meadows and woodlands away from water to forage and roost (Dunkle 2000).

## **Potential Species of Concern**

Global Rank: G4 State Rank: S2S4

## Black Arion - Arion ater

http://FieldGuide.mt.gov/detail\_IMGAS56010.aspx



Number of Observations: 0

## **Exotic Species** (not native to Montana)

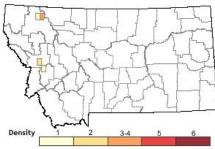
Global Rank: G5 State Rank: SNA

# Brown-banded Arion - Arion circumscriptus <a href="http://FieldGuide.mt.gov/detail\_IMGAS56020.aspx">http://FieldGuide.mt.gov/detail\_IMGAS56020.aspx</a>



## **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA



 $\textbf{Number of Observations} \colon 8$ 

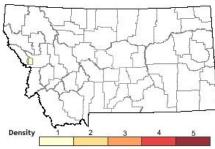
## **Darkface Arion - Arion distinctus**

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IMGAS56030.aspx}}$ 



## **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA



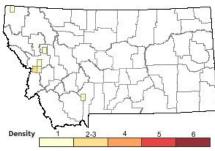
Number of Observations: 1

# Orange-banded Arion - *Arion fasciatus* http://FieldGuide.mt.gov/detail\_IMGAS56040.aspx



#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA



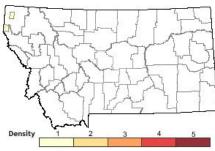
 $\textbf{Number of Observations} \colon 8$ 

# Hedgehog Arion - *Arion intermedius* <a href="http://FieldGuide.mt.gov/detail\_IMGAS56060.aspx">http://FieldGuide.mt.gov/detail\_IMGAS56060.aspx</a>



#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA



Number of Observations: 2

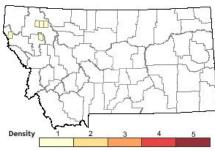
### **Chocolate Arion - Arion rutus**

http://FieldGuide.mt.gov/detail\_IMGAS56080.aspx



#### **Exotic Species** (not native to Montana)

Global Rank: G4G5 State Rank: SNA

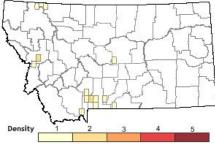


 $\textbf{Number of Observations} \colon 5$ 

### **Dusky Arion - Arion subfuscus**

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IMGAS56090.aspx}}$ 





 $\textbf{Number of Observations} \colon 15$ 

#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

# Montana Grasshopper - *Asemoplus montanus* <a href="http://FieldGuide.mt.gov/detail\_IIORTB3020.aspx">http://FieldGuide.mt.gov/detail\_IIORTB3020.aspx</a>



Global Rank: GU State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - *Asioplax edmundsi* http://FieldGuide.mt.gov/detail\_IIEPH42110.aspx



Global Rank: G4 State Rank: SNR



Number of Observations: 18

# A Caddisfly - Asynarchus aldinus http://FieldGuide.mt.gov/detail\_IITRI64540.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Asynarchus circopa http://FieldGuide.mt.gov/detail\_IITRIE1030.aspx



Global Rank: G2G4 State Rank: SNR

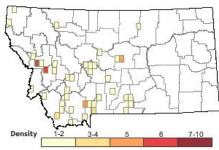
AGENCY STATUS USFWS: USFS: BLM:

# A True Fly - Atherix pachypus http://FieldGuide.mt.gov/detail\_IIDIP0U010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### **Arogos Skipper - Atrytone arogos**

http://FieldGuide.mt.gov/detail\_IILEP70010.aspx



Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 2

#### **General Description**

Males of this fairly small species (FW 1.3-1.4 cm.) are yellow above except for broad gray-brown borders. The veins are not darkened. Females are larger and darker above, often with yellow only on the FW (forewing) disc. The VHW (ventral hindwing) in both sexes is light yellow with slightly lighter veins. The mid tibiae are unspined and the others weakly so. The antennal club is long, in males almost as long as the shaft, and has an obtusely angled apiculus of medium length (Ferris and Brown, 1981). The mature larva is pale yellow-green with orange markings (Heitzman, 1966 in Stanford, 1981). The upf (upper side forewing) borders are very wide (esp. in females), and the ups (upper side) veins and unh (under hindwing) are yellow. Atrytone males lack a stigma. Eggs pale yellow, developing two reddish rings, laid singly under leaves (Scott, 1986). Male forewing: X = 1.3 cm, range 1.2-1.5 cm; female forewing: X = 1.5 cm, range 1.4-1.6 cm. Individuals from the plains populations are smaller than those from the Atlantic coast.

### **Dusted Skipper - Atrytonopsis hianna**

http://FieldGuide.mt.gov/detail\_IILEP79010.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

#### **General Description**

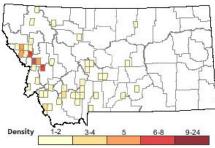
This fairly large (male forewing X = 1.7 cm, range 1.5-1.8 cm; female forewing X = 1.7 cm, range 1.6-1.8 cm.) medium brown to gray black skipper has pointed elongate FW (forewing) with three white subapical spots, one each with three white subapical spots, one each postdiscally in spaces M3-Cu1 and Cu1-Cu2, and sometimes a small one in the cell (Opler and Krizek, 1984; Stanford, 1981). The VFW (ventral forewing) apex and much of the VHW (ventral hindwing) are washed with delicate lilac-gray scales, and there is a suggestion of discal and postdiscal dark bands on the VHW. The uncheckered fringes are only slightly lighter than the wings (Stanford, 1981). Ventrally, the wings are dusted outwardly with gray and there is at least a single white spot at the base of the hindwing. There may be a postbasal and postmedian series of white spots on the ventral hindwings. Males have an inconspicuous stigma. The body and wing bases are darker than the remainder of the wings above (Stanford, 1981). The newly laid egg is bright lemon yellow and hemispherical. The mature caterpillar is pale pink-lavender dorsally, with the prothorax and lateral portions of the abdomen pale gray. The anal segment is pale brown and the prothoracic shield is dark brown. The body is also covered with long yellow-white hair. The head is deep red- purple. The pupa is dark brown with the wing cases light brown. The thoracic spiracles are ruby red (Opler and Krizek, 1984).

# A Mayfly - Attenella margarita http://FieldGuide.mt.gov/detail\_IIEPH55030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

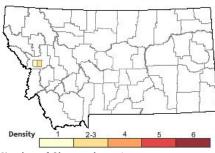


# A Millipede - Austrotyla montani http://FieldGuide.mt.gov/detail\_ITUNI14010.aspx



### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3

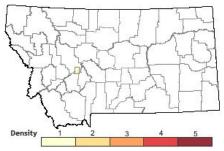


Number of Observations: 4

### Alfalfa Looper Moth - Autographa californica

http://FieldGuide.mt.gov/detail\_IILEY8R090.aspx





### Number of Observations: 1

### **General Description**

The alfalfa looper (*Autographa californica*) is medium-size (36-42 mm wingspan) grey-black moth with a silvery sheen and slight purplish cast in fresh specimens. Forewings are mottled pale grey in the basal and subterminal areas, with dark blackish-brown in the lower median area and along the subterminal line. The antemedian and postmedian lines and the area below the stigma are dark red-brown. The stigma (reniform spot) is fish-hooked shaped, silvery white, forms an outward curving arc with a rounded tip, and has a widely separated fork at the upper end. About one-third of the way down the subterminal line is a black dash which connects the subterminal and postmedian lines. Hindwings are dark sooty brown-black, paler in the basal half and shading into a wide dark terminal band. The antennae are simple and both the sexes are alike (Anweiler and Robinson no

Alfalfa Looper larvae are green with three pairs of white lines on the back, crawls by arching the body, and are 1 to 1.5 inches long when mature. Alfalfa Looper eggs are similar to those of the bollworm in that they are spherical with ridges radiating from top to bottom. However, Alfalfa Looper eggs are more flattened and have finer ridges radiating from the top to the bottom (Powell and Opler 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

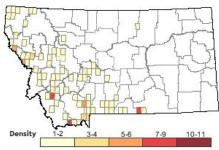
BLM:

# A Mayfly - Baetis bicaudatus http://FieldGuide.mt.gov/detail\_IIEPH26030.aspx



Global Rank: G5 State Rank: S5

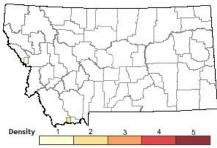
AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Baetis brunneicolor http://FieldGuide.mt.gov/detail\_IIEPH26050.aspx



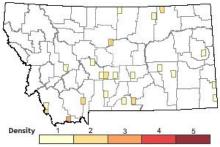
Global Rank: G5 State Rank: SNR



Number of Observations: 3

# A Mayfly - Baetis flavistriga http://FieldGuide.mt.gov/detail\_IIEPH26170.aspx





Number of Observations: 33

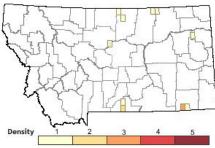
Global Rank: G5 State Rank: SNR

# A Mayfly - Baetis intercalaris http://FieldGuide.mt.gov/detail\_IIEPH26180.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### A Mayfly - Baetis tricaudatus

http://FieldGuide.mt.gov/detail\_IIEPH26130.aspx



Ponity 12 16 70 1015 1621

Number of Observations: 611

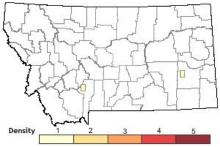
### **General Description**

This is our most widespread and abundant mayfly of running waters in the state; it can be found in small forested mountains stream systems to the largest riffle sections of the Missouri and Yellowstone Rivers.

Global Rank: G5 State Rank: S5

# A Mayfly - Baetisca lacustris http://FieldGuide.mt.gov/detail\_IIEPH05060.aspx





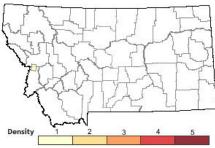
Number of Observations: 2

Global Rank: G5 State Rank: SNR

# A Caddisfly - Banksiola crotchi http://FieldGuide.mt.gov/detail\_IITRI30030.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 1

### A Grasshopper - Barracris petraea

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIORTB6010.aspx}}$ 



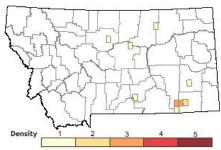
Global Rank: G3? State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Giant Water Bug - *Belostoma fluminea* <a href="http://FieldGuide.mt.gov/detail\_IIHEM08020.aspx">http://FieldGuide.mt.gov/detail\_IIHEM08020.aspx</a>



Global Rank: GNR State Rank: SNR

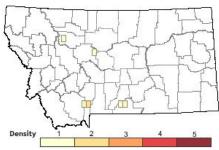


Number of Observations: 14

# A True Fly - Bibiocephala grandis http://FieldGuide.mt.gov/detail\_IIDIP0X010.aspx



Global Rank: GNR State Rank: SNR



Number of Observations: 7

# A Millipede - *Bistolodesmus bonikus* http://FieldGuide.mt.gov/detail\_ITUNI99010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### Mud Bithynia - Bithynia tentaculata

http://FieldGuide.mt.gov/detail\_IMGASF3010.aspx



Exotic Species (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

#### **General Description**

This introduced operculate snail species has been reported in Montana within the last 50 years (U of M, Royal Brunson's mollusk catalog). Also known as faucet snails, which is a misnomer as they prefer lakes and ponds instead of moving water (rivers and streams).

#### Habitat

In the shallow lakes and ponds where it resides this snail can be found on the underside of rocks and other substrates, as well as on aquatic macrophytes (milfoil (Myriophyllum spicatum and muskgrass, Chara spp.) in the warmer months (Kipp and Benson, 2010). And, found at the bottom of spring-water beds during winter, where water temperature does not go below 4°C during an average winter (Wächtler 2001). B. tentaculata will not be found in fast running water, since the high velocity will make it impossible for the snail to adhere to suitable substrates or macrophytes (Wächtler 2001).

# A Millipede - *Bollmaniulus montanae* <a href="http://FieldGuide.mt.gov/detail\_ITUNI07010.aspx">http://FieldGuide.mt.gov/detail\_ITUNI07010.aspx</a>



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

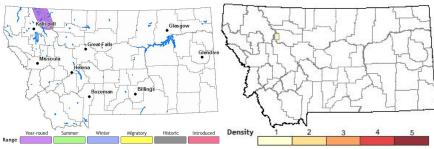
### Alberta Fritillary - *Boloria alberta* <a href="http://FieldGuide.mt.gov/detail\_IILEPJ7110.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ7110.aspx</a>



#### **Species of Concern**

Global Rank: G3 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



 ${\bf Number\ of\ Observations}\colon 1$ 

#### **General Description**

Dull and dark. Males smoky orange; females smoky brown and pale orange; both with blurred markings.

Barren, windswept alpine ridges.

### Astarte Fritillary - Boloria astarte

http://FieldGuide.mt.gov/detail\_IILEPJ7120.aspx



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

#### **General Description**

This high ridge and alpine frittilary has wings that are a dull orange-brown; upperside with dark markings heaviest near base of wings; underside of hindwing with white median and postmedian bands; submarginal and postmedian rows of small black spots and is limited to the high elevation ridges in and around Glacier Park area.

#### Habitat .

Windswept, barren, alpine and arctic ridges.

# Meadow Fritillary - Boloria bellona http://FieldGuide.mt.gov/detail\_IILEPJ7040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

# Arctic Fritillary - Boloria chariclea http://FieldGuide.mt.gov/detail\_IILEPJ7140.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



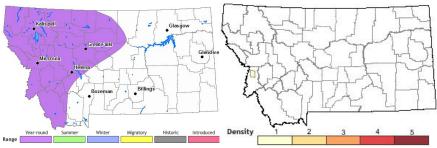
### Pacific Fritillary - Boloria epithore

http://FieldGuide.mt.gov/detail\_IILEPJ7080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 1

#### **General Description**

The Pacific Fritillary is a small (1 1/2 - 1 3/4 inches) butterfly found in isolated populations in the higher rocky mountains. Tip of forewing rounded. Upperside bright orange; black markings large on basal half of wing, small on outer half. Underside orange with purple-brown markings; hindwing with postmedian row of dark circles. They are flying in wooded or opening areas of willow bogs from late May-early August (Opler 2010).

#### Habitat

Openings in moist forests, wet meadows, streamsides.

### Bog Fritillary - Boloria eunomia

http://FieldGuide.mt.gov/detail\_IILEPJ7020.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

The Bog Fritillary is a small (1 1/4 -1 3/4 inches) butterfly found in isolated populations in the higher rocky mountains of Glacier and the Beartooths on Montana. Upperside orange-brown to tan with dark markings. Underside of hindwing orange with light nonmetallic bands; postmedian row spots are white bordered with black. Underside of hindwing with off-white patch near base of costal margin. They are flying in low areas of high elevation willow bogs from late June-early August (Opler 2010)

#### Habitat .

Mostly bogs, also wet tundra and moist alpine meadows and seeps. (Layberry et al., 1998; Opler, 1999).

### Freija Fritillary - Boloria freija

http://FieldGuide.mt.gov/detail\_IILEPJ7100.aspx



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 0

#### **General Description**

The Frieja Fritillary is a small (1 1/2 - 2 inches) butterfly found in isolated populations in the higher rocky mountains associated with the Northern Rocky Mountain Wooded Vernal Pool and Subalpine-Montane Fen ecological systems . Tip of forewing pointed. Wings orange-brown with black markings; darker at wing bases. Underside of hindwing with off-white patch near base of costal margin. They are found flying in low areas of willow bogs from late May-early August (Opler 2010).

#### Habitat \_

Open bogs, taiga, tundra, edges of open black spruce bogs, pine forests.

### Frigga Fritillary - Boloria frigga

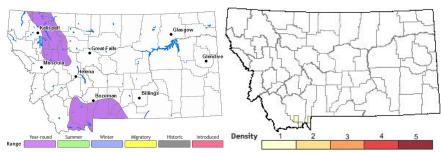
http://FieldGuide.mt.gov/detail\_IILEPJ7050.aspx



#### **Species of Concern**

Global Rank: G5 State Rank: S1S2





#### Number of Observations: 3

#### **General Description**

The Frigga Fritillary is a small (1 1/2 - 2 inches) butterfly found in isolated populations in the higher rocky mountains. Wings are orange-brown with black markings; darker at wing bases. Underside of hindwing with off-white patch near base of costal margin. Adults are flying in low areas of sedges and willow bogs from late May-early August. (Opler 2010).

#### Habitat .

Sedge and sphagnum bogs, arctic tundra (Opler, 1999) High elevation open water bogs with sedges.

### Relict Fritillary - Boloria kriemhild

http://FieldGuide.mt.gov/detail\_IILEPJ7070.aspx



Global Rank: G3G4 State Rank: S3S4

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 0$ 

The Relict Fritillary is a small (1 1/4 -1 3/4 inches) butterfly found in isolated populations in the rocky mountains. Upperside bright orange-brown with narrow black markings. Underside yellow-orange; forewing with submarginal band of outward-pointing brown chevrons; hindwing with median band of irregular yellow spots outlined with brown. They are flying in low areas of forest edges and moist meadow openings from mid-June-early August (Opler 2010).

#### Habitat .

Moist mountain meadows, forest openings and edges.

#### Silver-bordered Fritillary - Boloria selene

http://FieldGuide.mt.gov/detail\_IILEPJ7030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

#### General Description

Upperside orange with black markings. Underside of hindwing with rows of metallic silver spots; postmedian spots small and black.

#### Habitat

Wet meadows, bogs, marshes.

#### Glacier Snowfly - Bolshecapnia milami

http://FieldGuide.mt.gov/detail\_IIPLE02030.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Number of Observations: 0

#### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

#### Mission Mountains Snowfly - Bolshecapnia missiona

http://FieldGuide.mt.gov/detail\_IIPLE02070.aspx

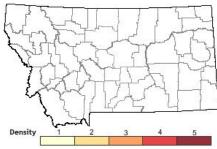


#### **Potential Species of Concern**

Global Rank: G2 State Rank: SNR

AGENCY STATUS

USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

Species within the Capniidae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

#### Habitat

Bolshecapnia missiona is known mostly from first order and small second order streams at elevations from 750 to 1500 meters above sea level. This species is reported from about a half dozen small to medium sized creeks in Flathead, Lake and Missoula Counties. These are generally high to moderate gradient with cobble and boulder dominated substrates. Grant Creek is a freestone stream fed directly by snowmelt and cold seeps. High elevation reaches flow in small cascading pools and riffles over small angular cobble and gravel with an open southerly exposure. Steep slopes at streamside release cold seepage into thick moss over deep sand and gravel mixed with woody debris (Baumann and Potter, 2007).

#### Ice Snowfly - Bolshecapnia spenceri

http://FieldGuide.mt.gov/detail\_IIPLE02060.aspx



Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Number of Observations: 0

#### **General Description**

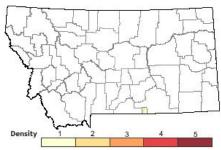
Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

This species occurs at or near high mountain lakes and their associated creeks (Stewart and Oswood, 2006).

### A True Fly - Boreochlus persimilis http://FieldGuide.mt.gov/detail\_IIDIP0V010.aspx



Global Rank: GNR State Rank: SNR



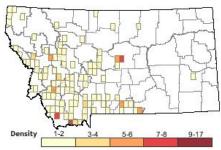
Number of Observations: 1

### A Caddisfly - Brachycentrus americanus http://FieldGuide.mt.gov/detail\_IITRIG2070.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

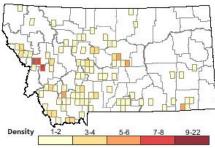


### A Caddisfly - Brachycentrus occidentalis <a href="http://FieldGuide.mt.gov/detail\_IITRIG2090.aspx">http://FieldGuide.mt.gov/detail\_IITRIG2090.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Slow Mountain Grasshopper - Bradynotes obesa <a href="http://FieldGuide.mt.gov/detail\_IIORTB9010.aspx">http://FieldGuide.mt.gov/detail\_IIORTB9010.aspx</a>



Global Rank: G4G5 State Rank: SNR

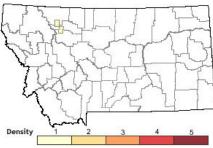
AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### Colorado Fairy Shrimp - *Branchinecta coloradensis* <a href="http://FieldGuide.mt.gov/detail\_ICBRA03070.aspx">http://FieldGuide.mt.gov/detail\_ICBRA03070.aspx</a>



Global Rank: G5 State Rank: SNR

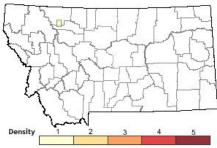


Number of Observations: 2

### Giant Fairy Shrimp - Branchinecta gigas http://FieldGuide.mt.gov/detail\_ICBRA03040.aspx



Global Rank: G3G4 State Rank: SNR

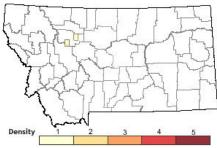


Number of Observations: 1

### Versatile Fairy Shrimp - *Branchinecta lindahli* <a href="http://FieldGuide.mt.gov/detail\_ICBRA03100.aspx">http://FieldGuide.mt.gov/detail\_ICBRA03100.aspx</a>



Global Rank: G5 State Rank: SNR

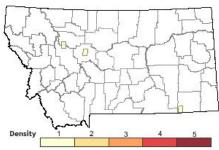


Number of Observations: 2

### Rock Pool Fairy Shrimp - *Branchinecta packardi* <a href="http://FieldGuide.mt.gov/detail\_ICBRA03120.aspx">http://FieldGuide.mt.gov/detail\_ICBRA03120.aspx</a>



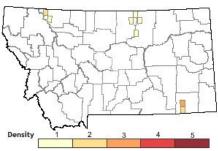
Global Rank: G5 State Rank: SNR



Number of Observations: 3

### Circumpolar Fairy Shrimp - Branchinecta paludosa <a href="http://FieldGuide.mt.gov/detail\_ICBRA03130.aspx">http://FieldGuide.mt.gov/detail\_ICBRA03130.aspx</a>





Number of Observations: 13

Global Rank: G5 State Rank: SNR

### A Millipede - Brunsonia albertana http://FieldGuide.mt.gov/detail\_ITUNI96010.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### An Aquatic Isopod - Caecidotea communis http://FieldGuide.mt.gov/detail\_ICMAL01390.aspx



Global Rank: G5 State Rank: SNR

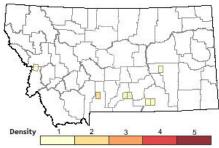
AGENCY STATUS USFWS: USFS: BLM:

### An Aquatic Isopod - Caecidotea racovitzai <a href="http://FieldGuide.mt.gov/detail\_ICMAL01400.aspx">http://FieldGuide.mt.gov/detail\_ICMAL01400.aspx</a>



Global Rank: G5 State Rank: SNR

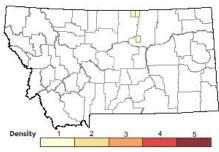
AGENCY STATUS USFWS: USFS: BLM:



### A Mayfly - Caenis amica http://FieldGuide.mt.gov/detail\_IIEPH17020.aspx



Global Rank: G5 State Rank: SNR



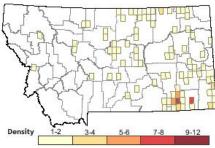
Number of Observations: 3

### A Mayfly - Caenis latipennis http://FieldGuide.mt.gov/detail\_IIEPH17030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## A Mayfly - Caenis tardata http://FieldGuide.mt.gov/detail\_IIEPH17110.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Mayfly - Caenis youngi http://FieldGuide.mt.gov/detail\_IIEPH17010.aspx



# Missoula Migratory Historic Introduced Density

 $\textbf{Number of Observations} \colon 16$ 

#### **Species of Concern**

Global Rank: G4 State Rank: S2

### A Millipede - Californiulus parvior http://FieldGuide.mt.gov/detail\_ITUNI95010.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

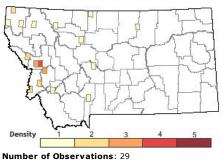
#### Western Stone - Calineuria californica

http://FieldGuide.mt.gov/detail\_IIPLE1P010.aspx



AGENCY STATUS USFWS: USFS: BLM:

Global Rank: G5 State Rank: SNR



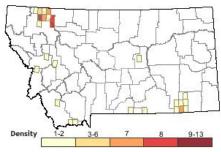
General Description

This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams.

### A Mayfly - Callibaetis ferrugineus http://FieldGuide.mt.gov/detail\_IIEPH62080.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 88

#### Habitat

 $Callibaet is \ common \ in \ lakes, \ permanent \ ponds, \ and \ slow-flowing \ portions \ of \ streams \ throughout \ North \ America.$ 

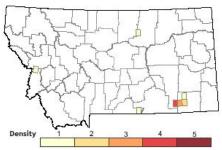
#### A Mayfly - Callibaetis fluctuans

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIEPH62040.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 13

#### Habitat

Callibaetis is common in lakes, permanent ponds, and slow-flowing portions of streams throughout North America.

### A Mayfly - Callibaetis pallidus http://FieldGuide.mt.gov/detail\_IIEPH62010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

Callibaetis is common in lakes, permanent ponds, and slow-flowing portions of streams throughout North America.

### A Mayfly - Callibaetis pictus http://FieldGuide.mt.gov/detail\_IIEPH62110.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

Callibaetis is common in lakes, permanent ponds, and slow-flowing portions of streams throughout North America.

### Western Green Hairstreak - Callophrys affinis <a href="http://FieldGuide.mt.gov/detail\_IILEPE2050.aspx">http://FieldGuide.mt.gov/detail\_IILEPE2050.aspx</a>



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



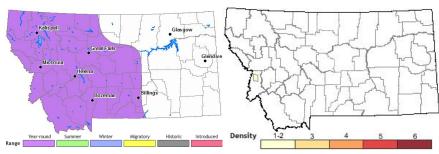
 $\textbf{Number of Observations} \colon 0$ 

### Brown Elfin - Callophrys augustinus http://FieldGuide.mt.gov/detail\_IILEPE2180.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

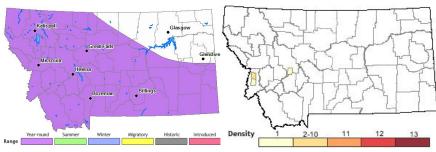


### Western Pine Elfin - Callophrys eryphon <a href="http://FieldGuide.mt.gov/detail\_IILEPE2250.aspx">http://FieldGuide.mt.gov/detail\_IILEPE2250.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

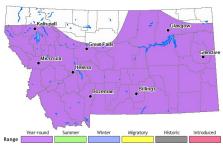


### Juniper Hairstreak - Callophrys gryneus <a href="http://FieldGuide.mt.gov/detail\_IILEPE2130.aspx">http://FieldGuide.mt.gov/detail\_IILEPE2130.aspx</a>



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

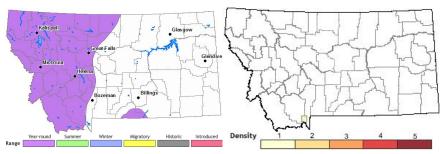


### Moss Elfin - *Callophrys mossii* http://FieldGuide.mt.gov/detail\_IILEPE2200.aspx



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



### Nelson's Hairstreak - Callophrys nelsoni http://FieldGuide.mt.gov/detail\_IILEPE2110.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



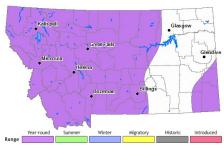
 $\textbf{Number of Observations} \colon 0$ 

### Hoary Elfin - Callophrys polios http://FieldGuide.mt.gov/detail\_IILEPE2210.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

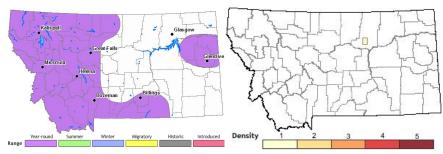


### Sheridan's Hairstreak - *Callophrys sheridanii* http://FieldGuide.mt.gov/detail\_IILEPE2070.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



#### Thicket Hairstreak - Callophrys spinetorum

http://FieldGuide.mt.gov/detail\_IILEPE2090.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

The Thicket Hairstreak (Callophrys spinetorum) is tailed. The upperside is steel-blue with wide dark margins. The underside is reddish brown. The hindwing has a black-edged white postmedian band that forms a W near the tails. The wing span is 25 - 32 mm (Opler et al. 2010).

The larva are green with an olive-colored stripe down the back, and red, white, and yellow stripes on each well-defined ridge (McLeod 2006).

#### Habitat .

Pinyon-juniper forest, mixed woodland, coniferous forest (Opler et al. 2010).

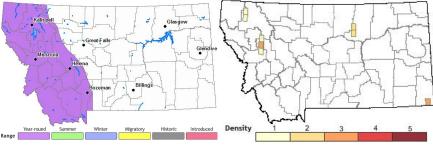
#### River Jewelwing - Calopteryx aequabilis

http://FieldGuide.mt.gov/detail\_IIODO65010.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 14

#### **General Description**

This is a large damselfly about 1 % to 2 % inches long (45 to 52 mm). The body is robust, especially in the females. The color is an unmistakable iridescent green or blue. The outer third of the wing is black. Flight can look erratic with the black tipped wings, as they are weak but graceful flyers.

#### Habitat

The River Jewelwing is found in swift and rocky forested clear streams and rivers with shade and patchy sunlight. Optimum habitats have sufficient submergent vegetation present (Nikula et al. 2002, Acorn 2004, Paulson 2009). However, they have also recently been found along in perennially flowing spring creeks in eastern Montana (Stagliano 2007).

### A Mayfly - Camelobaetidius warreni

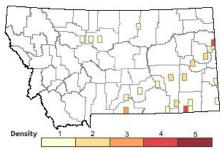
http://FieldGuide.mt.gov/detail\_IIEPH65010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 34

#### **General Description**

Larvae of Camelobaetidius are differentiated from those of all other Baetids by the presence of spatulate tarsal claws.

#### Habitat

Camelobaetidius are primarily found in warm, silty rivers in the central & southwestern United States, Mexico, and Central and South America. Larvae in a Canadian study were found near the shore over a silty gravel and rubble substrate in moderate current (Lehmkuhl, unpublished).

### Cheama Snowfly - Capnia cheama

http://FieldGuide.mt.gov/detail\_IIPLE03040.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

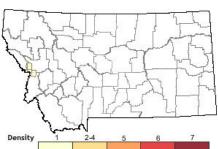
#### Number of Observations: 0

#### **General Description**

### Colorado Snowfly - Capnia coloradensis

http://FieldGuide.mt.gov/detail\_IIPLE03050.aspx





#### Number of Observations: 7

#### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### Widespread Snowfly - Capnia confusa

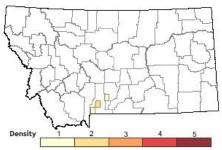
http://FieldGuide.mt.gov/detail\_IIPLE03060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 4

#### **General Description**

### Slender Snowfly - Capnia gracilaria

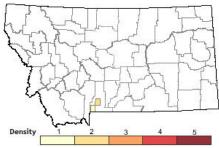
http://FieldGuide.mt.gov/detail\_IIPLE03150.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 3

#### **General Description**

### **Dwarf Snowfly - Capnia nana**

http://FieldGuide.mt.gov/detail\_IIPLE03260.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

#### **General Description**

### Thin Snowfly - Capnia petila

http://FieldGuide.mt.gov/detail\_IIPLE03310.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Number of Observations: 0

#### **General Description**

### Six-knobbed Snowfly - Capnia sextuberculata

http://FieldGuide.mt.gov/detail\_IIPLE03390.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

#### **General Description**

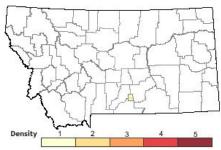
### **Belly Snowfly - Capnia vernalis**

http://FieldGuide.mt.gov/detail\_IIPLE03490.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 1

#### **General Description**

### Falcate Snowfly - Capnura venosa

http://FieldGuide.mt.gov/detail\_IIPLE03580.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

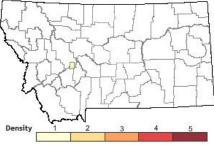
BLM:

Number of Observations: 0

#### **General Description**

# A Noctuid Moth - Caradrina meralis http://FieldGuide.mt.gov/detail\_IILEYD9010.aspx





Number of Observations: 1

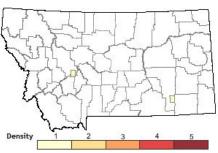
Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Civil Rustic Moth - Caradrina montana

http://FieldGuide.mt.gov/detail\_IILEYD8030.aspx





### Number of Observations: 2

### **General Description**

The Caradrina montana wingspan is 26 - 31 mm. The forewing is pale gray or brownish-gray with dark reniform and orbicular spots. The reniform spot has white dots around its perimeter. The antemedian and postmedian lines are usually broken into dots. There are 4 or 5 black marks along costa (anterior vein of the wing). The subterminal area may have dark shading. The hindwing is white with a dark-spotted terminal line (Powell and Opler, 2009).

C. montana prefers dry open forests (Powell and Opler, 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

# A Bark Beetle - Carphoborus carri http://FieldGuide.mt.gov/detail\_IICOLHB010.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - Carphoborus pinicolens http://FieldGuide.mt.gov/detail\_IICOL7E020.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Bark Beetle - Carphoborus ponderosae <a href="http://FieldGuide.mt.gov/detail\_IICOL7E030.aspx">http://FieldGuide.mt.gov/detail\_IICOL7E030.aspx</a>



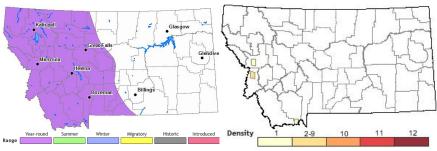
Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# Arctic Skipper - Carterocephalus palaemon <a href="http://FieldGuide.mt.gov/detail\_IILEP42010.aspx">http://FieldGuide.mt.gov/detail\_IILEP42010.aspx</a>



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



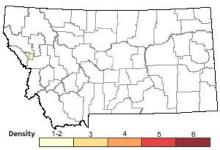
### Cascades Stripetail - Cascadoperla trictura

http://FieldGuide.mt.gov/detail\_IIPLE22010.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 2

#### Habitat

Found in creeks and rivers (Baumann et al. 1977; Szczytko and Stewart 1979). Merritt and Cummins (1996) report the habit of this species as "clingers and crawlers" and like most Perlodidae are predators, consuming other insects, especially midges and blackflies.

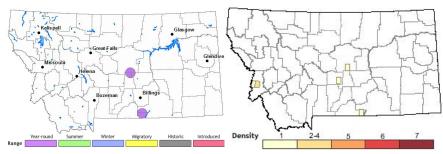
### Chrome Ambersnail - Catinella rehderi

http://FieldGuide.mt.gov/detail\_IMGAS66060.aspx



Global Rank: G3Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



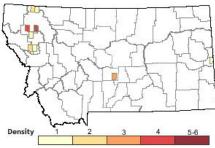
### Suboval Ambersnail - Catinella vermeta

http://FieldGuide.mt.gov/detail\_IMGAS66130.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# The Sweetheart Underwing - Catocala amatrix <a href="http://FieldGuide.mt.gov/detail\_IILEY89660.aspx">http://FieldGuide.mt.gov/detail\_IILEY89660.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Briseis Underwing - Catocala briseis <a href="http://FieldGuide.mt.gov/detail\_IILEY89480.aspx">http://FieldGuide.mt.gov/detail\_IILEY89480.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# An Underwing Moth - Catocala californica http://FieldGuide.mt.gov/detail\_IILEY89450.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# An Underwing Moth - Catocala faustina http://FieldGuide.mt.gov/detail\_IILEY89420.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# An Underwing Moth - Catocala faustina allusa <a href="http://FieldGuide.mt.gov/detail\_IILEY89400.aspx">http://FieldGuide.mt.gov/detail\_IILEY89400.aspx</a>



Global Rank: G4T4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# An Underwing Moth - Catocala hermia http://FieldGuide.mt.gov/detail\_IILEY89430.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Joined Underwing - Catocala junctura http://FieldGuide.mt.gov/detail\_IILEY89600.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# **Luciana Underwing - Catocala luciana** http://FieldGuide.mt.gov/detail\_IILEY89390.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Meske's Underwing - Catocala meskei <a href="http://FieldGuide.mt.gov/detail\_IILEY89530.aspx">http://FieldGuide.mt.gov/detail\_IILEY89530.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Praeclara Underwing - Catocala praeclara <a href="http://FieldGuide.mt.gov/detail\_IILEY89980.aspx">http://FieldGuide.mt.gov/detail\_IILEY89980.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Manitoba Underwing - Catocala praeclara manitoba <a href="http://FieldGuide.mt.gov/detail\_IILEY89982.aspx">http://FieldGuide.mt.gov/detail\_IILEY89982.aspx</a>



Global Rank: G5TU State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# White Underwing - Catocala relicta http://FieldGuide.mt.gov/detail\_IILEY89340.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Semirelict Underwing - Catocala semirelicta http://FieldGuide.mt.gov/detail\_IILEY89520.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# **Ultronia Underwing - Catocala ultronia** http://FieldGuide.mt.gov/detail\_IILEY89890.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Once-married Underwing - Catocala unijuga <a href="http://FieldGuide.mt.gov/detail\_IILEY89360.aspx">http://FieldGuide.mt.gov/detail\_IILEY89360.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Northern Rocky Mountains Refugium Mayfly - Caudatella edmundsi

http://FieldGuide.mt.gov/detail\_IIEPH83020.aspx

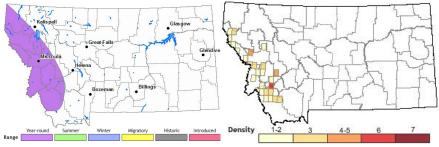


#### **Potential Species of Concern**

Global Rank: G3G4 State Rank: S3

AGENCY STATUS

USFWS: USFS: BLM:



Number of Observations: 63

### **General Description**

This yellow-colored Ephemerellid mayfly is a disjunct regional endemic to the Northern Rocky Mountain refugium region centered on the Montana/Idaho border. Other populations are found on the Oregon, Washington and California coastal ranges.

#### Habitat

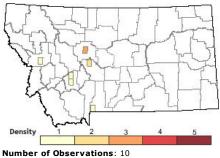
Very little is known of the habitat preference of this species (P. McCafferty, personal communication, December 2004), but like other Caudatella, this species is associated with relatively pristine, cold flowing streams and rivers (Allen 1961) and is a listed as a coldwater stenotherm (IDDEQ 2002). Hawkins (1984) found C. edmundsi & Drunella spinifera larvae most abundant when associated with mossy cobbles and boulders in an Oregon stream. Most of the Montana collection records are from 2nd-3rd order streams capable of sustaining Westslope cutthroat trout populations with at least 50% riparian shading and mossy cobble/boulder substrate. Sites with this species present, visited in 2006, correlated with this stream type (avg. wetted width-2.5 m, heavy moss growth on the cobbles).

# A Mayfly - Caudatella heterocaudata http://FieldGuide.mt.gov/detail\_IIEPH83030.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:





# A Mayfly - Caudatella hystrix http://FieldGuide.mt.gov/detail\_IIEPH83040.aspx





Number of Observations: 72

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

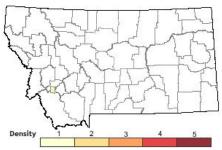
## A Mayfly - Caudatella jacobi

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIEPH83050.aspx}}$ 



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



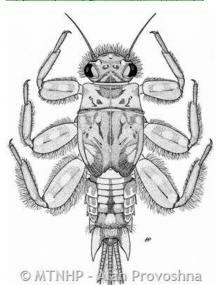
#### $\ \, \textbf{Number of Observations} \colon 1 \\$

#### Habitat

Habitat appears similar to the better known Caudatella hystrix, including riffle habitats in small to medium sized streams and often in association with algal growths (McCafferty, pers. comm, Dec. 2003) cobbles (Newell,R, pers. comm 2010).

#### Lolo Mayfly - Caurinella idahoensis

http://FieldGuide.mt.gov/detail\_IIEPH84010.aspx



# Rals pell Great Falls Great F

#### Number of Observations: 6

#### **General Description**

This robust little mayfly with distinctive lateral projections on it's adbomen is restricted to the cold-water headwater streams of the Lolo Pass (Lolo national Forest) Region of Montana and Idaho. Despite many recent searches elsewhere in the Lolo Forest, it seems fairly restricted to this specific area (Stagliano 2008, USFS report).

#### Habitat

This species is a listed as a coldwater stenotherm (IDDEQ 2002b) and was collected from second order perennial mountain streams with moderately swift current and cobble/gravel rock substrates. Specimens collected at Brushy Creek, Idaho County (Jacobus and McCafferty 2004) were found where the depth ranged from 15-50 cm and the stream width was 4-5 m. The substrate was composed mostly of pale, rough cobble and boulders that were 8-30 cm in diameter, with some bedrock present. The riparian canopy was not completely shading the stream reach. Nymphs were found at the bases of small, ear-like macrocolonies of a blue green alga (Nostoc parmelioides), which occurred on cobble and rock surfaces exposed to the stream current. Laboratory observations indicate that larvae possibly defend small territories on rock surfaces (Jacobus and McCafferty 2004). The morphology of the mouthparts suggests that C. idahoensis is well-suited for scraping, biting or shredding, thus its trophic relationships would include scrapers and collectors-gatherers (detritus, algae, diatoms) (Merritt and Cummins 1996, Jacobus and McCafferty 2004).

#### **Species of Concern**

Global Rank: G3 State Rank: S2

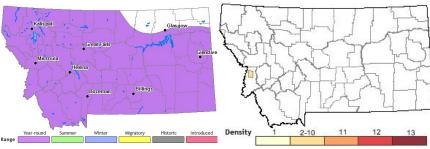
AGENCY STATUS USFWS: USFS: BLM:

# Spring Azure - Celastrina ladon http://FieldGuide.mt.gov/detail\_IILEPG0010.aspx



Global Rank: G4G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

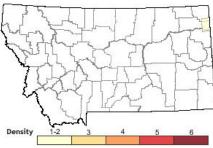


# Northern Spring Azure - Celastrina lucia http://FieldGuide.mt.gov/detail\_IILEPG0100.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



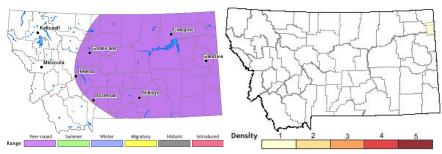
Number of Observations: 2

# **Summer Azure -** *Celastrina neglecta* <a href="http://FieldGuide.mt.gov/detail\_IILEPG0050.aspx">http://FieldGuide.mt.gov/detail\_IILEPG0050.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Centroptilum bifurcatum <a href="http://FieldGuide.mt.gov/detail\_IIEPH34090.aspx">http://FieldGuide.mt.gov/detail\_IIEPH34090.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### Number of Observations: 0

In Saskatchewan, C.bifurcatum was found primarily in large rivers (Webb 2002).

# A Mayfly - Centroptilum conturbatum <a href="http://FieldGuide.mt.gov/detail\_IIEPH34120.aspx">http://FieldGuide.mt.gov/detail\_IIEPH34120.aspx</a>

THERE HET HANDLAND	

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0
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Habitat \_\_\_

# A Mayfly - Centroptilum victoriae http://FieldGuide.mt.gov/detail\_IIEPH34050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ceraclea alagma

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2A180.aspx}}$ 



Global Rank: G5 State Rank: SNR

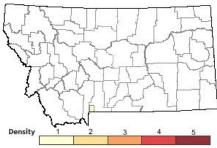
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Ceraclea annulicornis http://FieldGuide.mt.gov/detail\_IITRI64290.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# A Caddisfly - Ceraclea cancellata http://FieldGuide.mt.gov/detail\_IITRI2A120.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Ceraclea copha http://FieldGuide.mt.gov/detail\_IITRI2A280.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

## A Caddisfly - Ceraclea diluta

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2A190.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ceraclea maculata

http://FieldGuide.mt.gov/detail\_IITRI2A140.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ceraclea resurgens

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2A100.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ceraclea tarsipunctata

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2A160.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ceraclea transversa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2A170.aspx}}$ 



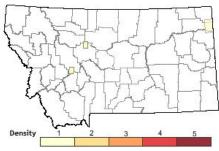
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Waved Sphinx Moth - Ceratomia undulosa

http://FieldGuide.mt.gov/detail\_IILEX07020.aspx





#### Number of Observations: 3

#### General Description

The Waved Sphinx Moth (*Ceratomia undulosa*) forewing is variably pale gray to yellowish-brown with a distinct white reniform spot and several dark wavy lines completely crossing wing. The forewing lacks black basal dash (an important distinction). The hindwing is brownish-gray with three darker lines crossing wing, and with a white and dark checkered fringe. The wing span is 76 to 110 mm (Coin 2004).

Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:

The larvae's body is usually greenish, sometimes reddish, with 7 pairs of oblique lateral stripes. The lower end of the stripes extend only to intersegmental area, and lack the white granulose spotting. The head has a pink or yellow band running from eyes to crown, and has a pinkish horn. The anal plate is convex above. The anal plate and anal prolegs have conspicuous black spotting (Coin 2004).

#### Habitat

The Waved Sphinx Moth is one of the most common sphinx moths and prefers deciduous forests, woodlots, tree plantations, shrubby areas, suburban and riparian areas (Coin 2004).

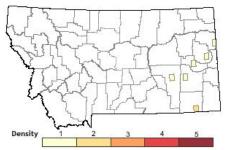
## A Caddisfly - Ceratopsyche bronta

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI36010.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 7

## A Caddisfly - Ceratopsyche cockerelli

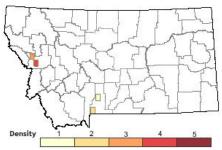
 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI63450.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 10$ 

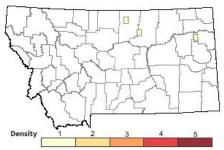
## A Caddisfly - Ceratopsyche morosa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI36030.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 3

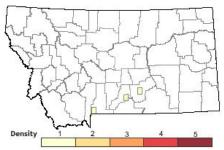
## A Caddisfly - Ceratopsyche oslari

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRIG6010.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 3

## A Caddisfly - Ceratopsyche slossonae

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI36040.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

## A Caddisfly - Ceratopsyche tana

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI36180.aspx}}$ 



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

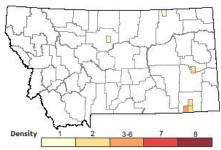
#### Habitat

# A Mayfly - Cercobrachys cree <a href="http://FieldGuide.mt.gov/detail\_IIEPH47040.aspx">http://FieldGuide.mt.gov/detail\_IIEPH47040.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 14

This species is associated with larger, perennially flowing prairie streams and rivers with sand-gravel dominated bottoms with cobble riffles.

# Mead's Wood Nymph - Cercyonis meadii http://FieldGuide.mt.gov/detail\_IILEPN7020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

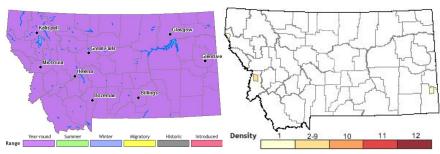


# Small Wood Nymph - Cercyonis oetus http://FieldGuide.mt.gov/detail\_IILEPN7040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

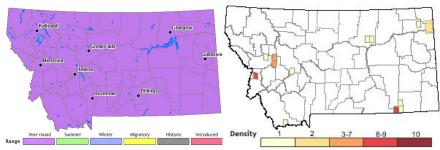


# Common Wood-Nymph - Cercyonis pegala <a href="http://FieldGuide.mt.gov/detail\_IILEPN7010.aspx">http://FieldGuide.mt.gov/detail\_IILEPN7010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

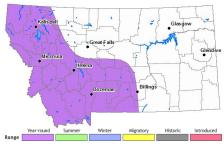


# **Great Basin Wood Nymph -** *Cercyonis sthenele* <a href="http://FieldGuide.mt.gov/detail\_IILEPN7030.aspx">http://FieldGuide.mt.gov/detail\_IILEPN7030.aspx</a>



Global Rank: G5 State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:



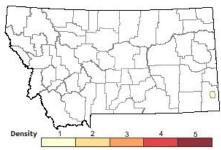
 $\textbf{Number of Observations} \colon 0$ 

# A Naiadid Worm - Chaetogaster limnaei http://FieldGuide.mt.gov/detail\_IAPOL07020.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# A Bark Beetle - Chaetophloeus heterodoxus <a href="http://FieldGuide.mt.gov/detail\_IICOLZY010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZY010.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

## A Caddisfly - Cheumatopsyche analis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22260.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

Habitat

## A Caddisfly - Cheumatopsyche campyla

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22170.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### Habitat

## A Caddisfly - Cheumatopsyche enonis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22390.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Caddisfly - Cheumatopsyche gracilis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22130.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

labitat

#### A Caddisfly - Cheumatopsyche lasia

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22240.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### A Caddisfly - Cheumatopsyche logani

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22300.aspx}}$ 



Global Rank: G3G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### Hahitat

#### A Caddisfly - Cheumatopsyche oxa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22200.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### A Caddisfly - Cheumatopsyche pasella

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22070.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

Habitat

#### A Caddisfly - Cheumatopsyche smithi

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI63530.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### A Caddisfly - Cheumatopsyche speciosa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI22230.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

# A Caddisfly - Chimarra angustipennis http://FieldGuide.mt.gov/detail\_IITRI65520.aspx



Global Rank: G5 State Rank: SNR

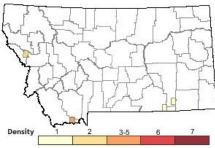
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Chimarra utahensis http://FieldGuide.mt.gov/detail\_IITRI03210.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

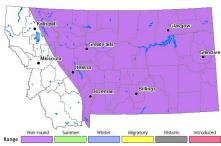


# **Sagebrush Checkerspot -** *Chlosyne acastus*<a href="http://FieldGuide.mt.gov/detail\_IILEPJ9170.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ9170.aspx</a>



Global Rank: G4G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

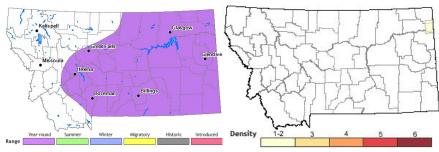


# Gorgone Checkerspot - Chlosyne gorgone <a href="http://FieldGuide.mt.gov/detail\_IILEPJ9130.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ9130.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# **Silvery Checkerspot -** *Chlosyne nycteis*<a href="http://FieldGuide.mt.gov/detail\_IILEP39140.aspx">http://FieldGuide.mt.gov/detail\_IILEP39140.aspx</a>



Global Rank: G5 State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:



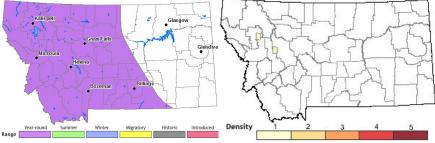
#### Northern Checkerspot - Chlosyne palla

http://FieldGuide.mt.gov/detail\_IILEPJ9160.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS:

BLM:



#### Number of Observations: 2

#### **General Description**

The upperside of the male Northern Checkerspot (*Chlosyne palla*) is brownish red with a pale median band, and the base of the hindwing is dark. The underside is brownish orange with creamy white bands. The female may be similar to the male, or black with white spots. The wing span is about 35 - 48 mm (Opler et al. 2010).

The larvae are white-spotted and black, with dorsal and lateral orange dashes and black spines (Scott 1986).

#### Habitat .

 $Coastal\ chaparral,\ open\ woodland,\ sagebrush,\ meadows,\ streamsides\ (Opler\ et\ al.\ 2010).$ 

#### Rockslide Checkerspot - Chlosyne whitneyi

http://FieldGuide.mt.gov/detail\_IILEPJ9200.aspx



#### **Potential Species of Concern**

Global Rank: G4G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 0

This true Brush-footed Butterflies (Nymphalidae) has been reported from rocky slopes, benches, and rockslides at or above treeline (Opler 2010). Identification: Upperside is slightly glossy black with pale orange to creamy white bands; female may be much darker. Underside of hindwing with a light orange marginal band, then alternating orange and creamy white bands on remainder of wing.

#### Habitat \_

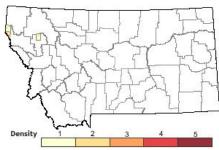
Rocky slopes, benches, and rockslides at or above treeline.

# A Millipede - Chonaphe armata http://FieldGuide.mt.gov/detail\_ITUNI97010.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



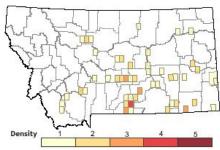
Number of Observations: 4

# A Mayfly - Choroterpes albiannulata http://FieldGuide.mt.gov/detail\_IIEPH58020.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

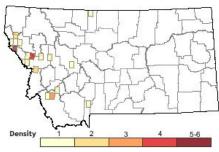


# A Caddisfly - Chyrandra centralis http://FieldGuide.mt.gov/detail\_IITRI64610.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Coppery Tiger Beetle - *Cicindela cuprascens* <a href="http://FieldGuide.mt.gov/detail\_IICOL026A0.aspx">http://FieldGuide.mt.gov/detail\_IICOL026A0.aspx</a>



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3

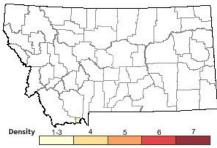
AGENCY STATUS USFWS: USFS: BLM:

# Badlands Tiger Beetle - *Cicindela decemnotata* <a href="http://FieldGuide.mt.gov/detail\_IICOL023C0.aspx">http://FieldGuide.mt.gov/detail\_IICOL023C0.aspx</a>



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 3

# **Green Claybank Tiger Beetle -** *Cicindela denverensis*<a href="http://FieldGuide.mt.gov/detail\_IICOL023B0.aspx">http://FieldGuide.mt.gov/detail\_IICOL023B0.aspx</a>



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

# Dispirited Tiger Beetle - *Cicindela depressula* <a href="http://FieldGuide.mt.gov/detail\_IICOL02370.aspx">http://FieldGuide.mt.gov/detail\_IICOL02370.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

# **Dispirited Tiger Beetle -** *Cicindela depressula depressula*<a href="http://FieldGuide.mt.gov/detail\_IICOL02372.aspx">http://FieldGuide.mt.gov/detail\_IICOL02372.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Twelve-spotted Tiger Beetle - *Cicindela duodecimguttata* <a href="http://FieldGuide.mt.gov/detail\_IICOL02240.aspx">http://FieldGuide.mt.gov/detail\_IICOL02240.aspx</a>

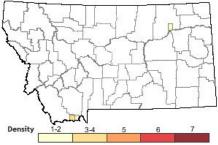


Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

# **Big Sand Tiger Beetle -** *Cicindela formosa* <a href="http://FieldGuide.mt.gov/detail\_IICOL02040.aspx">http://FieldGuide.mt.gov/detail\_IICOL02040.aspx</a>





Number of Observations: 8

Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

# Crimson Saltflat Tiger Beetle - Cicindela fulgida http://FieldGuide.mt.gov/detail\_IICOL023G0.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

# Crimson Saltflat Tiger Beetle - Cicindela fulgida fulgida <a href="http://FieldGuide.mt.gov/detail\_IICOL023G6.aspx">http://FieldGuide.mt.gov/detail\_IICOL023G6.aspx</a>



Global Rank: G5T4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Crimson Saltflat Tiger Beetle - Cicindela fulgida westbournei <a href="http://FieldGuide.mt.gov/detail\_IICOL023G1.aspx">http://FieldGuide.mt.gov/detail\_IICOL023G1.aspx</a>



Global Rank: G5T4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Beach-dune Tiger Beetle - Cicindela hirticollis <a href="http://FieldGuide.mt.gov/detail\_IICOL02100.aspx">http://FieldGuide.mt.gov/detail\_IICOL02100.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

# Hairy-necked Tiger Beetle - Cicindela hirticollis shelfordi <a href="http://FieldGuide.mt.gov/detail\_IICOL0210A.aspx">http://FieldGuide.mt.gov/detail\_IICOL0210A.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Blowout Tiger Beetle - Cicindela lengi http://FieldGuide.mt.gov/detail\_IICOL023J0.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

# Blowout Tiger Beetle - *Cicindela lengi versuta* <a href="http://FieldGuide.mt.gov/detail\_IICOL023J1.aspx">http://FieldGuide.mt.gov/detail\_IICOL023J1.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# **Ghost Tiger Beetle -** *Cicindela lepida*<a href="http://FieldGuide.mt.gov/detail\_IICOL02250.aspx">http://FieldGuide.mt.gov/detail\_IICOL02250.aspx</a>



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Common Claybank Tiger Beetle - Cicindela limbalis <a href="http://FieldGuide.mt.gov/detail\_IICOL02210.aspx">http://FieldGuide.mt.gov/detail\_IICOL02210.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Sandy Tiger Beetle - Cicindela limbata http://FieldGuide.mt.gov/detail\_IICOL02160.aspx



#### **Potential Species of Concern**

Global Rank: G4 State Rank: S3

AGENCY STATUS USFWS: USFS: BLM:

# Sandy Tiger Beetle - *Cicindela limbata nympha* <a href="http://FieldGuide.mt.gov/detail\_IICOL02163.aspx">http://FieldGuide.mt.gov/detail\_IICOL02163.aspx</a>



Global Rank: G4T4 State Rank: SNR

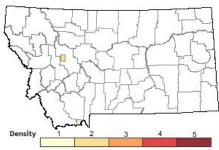
AGENCY STATUS USFWS: USFS: BLM:

# Boreal Long-lipped Tiger Beetle - Cicindela longilabris <a href="http://FieldGuide.mt.gov/detail\_IICOL02300.aspx">http://FieldGuide.mt.gov/detail\_IICOL02300.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Boreal Long-lipped Tiger Beetle - *Cicindela longilabris laurentii* <a href="http://FieldGuide.mt.gov/detail\_IICOL02303.aspx">http://FieldGuide.mt.gov/detail\_IICOL02303.aspx</a>



Global Rank: G5T4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Boreal Long-lipped Tiger Beetle - *Cicindela longilabris longilabris* <a href="http://FieldGuide.mt.gov/detail\_IICOL02306.aspx">http://FieldGuide.mt.gov/detail\_IICOL02306.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Boreal Long-lipped Tiger Beetle - Cicindela longilabris perviridis <a href="http://FieldGuide.mt.gov/detail\_IICOL02305.aspx">http://FieldGuide.mt.gov/detail\_IICOL02305.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Prairie Long-lipped Tiger Beetle - Cicindela nebraskana

http://FieldGuide.mt.gov/detail\_IICOL02330.aspx



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

### **General Description**

Adults of C. NEBRASKANA are distinguished from C. LONGILABRIS adults by the relatively smooth elytral surface with puntations occurring in discrete fashion, with smooth fields between, normally black abdomen varying to metallic purple or blue and green in a small percentage of specimens, absence of humeral and apical lunules, and, in most specimens, absence of middle band, black dorsal coloration in the majority of specimens, and a labrum which is tan in color 44.8%, intermediate colored or mottled in 30.6% and black in 124.6% of females, and light in 82.6%, intermediate colored or mottled in 15.6%, and black in 1.8% of male specimens. Formal descriptions of C. NEBRASKANA are found in LeConte (1861) under the name C. MONTANA, and in Leng (1902), Casey (1909), and Leffler (1979).

## Nevada Tiger Beetle - *Cicindela nevadica* <a href="http://FieldGuide.mt.gov/detail\_IICOL02170.aspx">http://FieldGuide.mt.gov/detail\_IICOL02170.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Nevada Tiger Beetle - *Cicindela nevadica knausii* <a href="http://FieldGuide.mt.gov/detail\_IICOL02172.aspx">http://FieldGuide.mt.gov/detail\_IICOL02172.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Western Tiger Beetle - *Cicindela oregona* <a href="http://FieldGuide.mt.gov/detail\_IICOL02360.aspx">http://FieldGuide.mt.gov/detail\_IICOL02360.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

# Western Tiger Beetle - *Cicindela oregona guttifera* <a href="http://FieldGuide.mt.gov/detail\_IICOL02361.aspx">http://FieldGuide.mt.gov/detail\_IICOL02361.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Western Tiger Beetle - *Cicindela oregona oregona* <a href="http://FieldGuide.mt.gov/detail\_IICOL02364.aspx">http://FieldGuide.mt.gov/detail\_IICOL02364.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Punctured Tiger Beetle - *Cicindela punctulata* <a href="http://FieldGuide.mt.gov/detail\_IICOL023Z0.aspx">http://FieldGuide.mt.gov/detail\_IICOL023Z0.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

## Punctured Tiger Beetle - *Cicindela punctulata punctulata* <a href="http://FieldGuide.mt.gov/detail\_IICOL023Z3.aspx">http://FieldGuide.mt.gov/detail\_IICOL023Z3.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Cow Path Tiger Beetle - Cicindela purpurea <a href="http://FieldGuide.mt.gov/detail\_IICOL02280.aspx">http://FieldGuide.mt.gov/detail\_IICOL02280.aspx</a>





Number of Observations: 3

Density

Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

# Bronzed Tiger Beetle - *Cicindela repanda* <a href="http://FieldGuide.mt.gov/detail\_IICOL02340.aspx">http://FieldGuide.mt.gov/detail\_IICOL02340.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

# Bronzed Tiger Beetle - *Cicindela repanda repanda* <a href="http://FieldGuide.mt.gov/detail\_IICOL02343.aspx">http://FieldGuide.mt.gov/detail\_IICOL02343.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Festive Tiger Beetle - *Cicindela scutellaris* <a href="http://FieldGuide.mt.gov/detail\_IICOL02290.aspx">http://FieldGuide.mt.gov/detail\_IICOL02290.aspx</a>



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

## Festive Tiger Beetle - *Cicindela scutellaris scutellaris* <a href="http://FieldGuide.mt.gov/detail\_IICOL02298.aspx">http://FieldGuide.mt.gov/detail\_IICOL02298.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Variable Tiger Beetle - *Cicindela terricola* <a href="http://FieldGuide.mt.gov/detail\_IICOL025V0.aspx">http://FieldGuide.mt.gov/detail\_IICOL025V0.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

## Variable Tiger Beetle - *Cicindela terricola cinctipennis* http://FieldGuide.mt.gov/detail\_IICOL025V6.aspx



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Variable Tiger Beetle - *Cicindela terricola imperfecta* <a href="http://FieldGuide.mt.gov/detail\_IICOL025V2.aspx">http://FieldGuide.mt.gov/detail\_IICOL025V2.aspx</a>



Global Rank: G5T5 State Rank: SNR

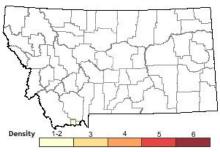
AGENCY STATUS USFWS: USFS: BLM:

## Oblique-lined Tiger Beetle - *Cicindela tranquebarica* <a href="http://FieldGuide.mt.gov/detail\_IICOL02200.aspx">http://FieldGuide.mt.gov/detail\_IICOL02200.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

## Oblique-lined Tiger Beetle - *Cicindela tranquebarica kirbyi* <a href="http://FieldGuide.mt.gov/detail\_IICOL02202.aspx">http://FieldGuide.mt.gov/detail\_IICOL02202.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Oblique-lined Tiger Beetle - *Cicindela tranquebarica roguensis* <a href="http://FieldGuide.mt.gov/detail\_IICOL02206.aspx">http://FieldGuide.mt.gov/detail\_IICOL02206.aspx</a>



Global Rank: G5T4Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Oblique-lined Tiger Beetle - *Cicindela tranquebarica tranquebarica* <a href="http://FieldGuide.mt.gov/detail\_IICOL0220D.aspx">http://FieldGuide.mt.gov/detail\_IICOL0220D.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Oblique-lined Tiger Beetle - *Cicindela tranquebarica vibex* <a href="http://FieldGuide.mt.gov/detail\_IICOL02208.aspx">http://FieldGuide.mt.gov/detail\_IICOL02208.aspx</a>



Global Rank: G5T3Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - Cinygmula tarda http://FieldGuide.mt.gov/detail\_IIEPH56090.aspx



Number of Observations: 0

Global Rank: G4 State Rank: SNR

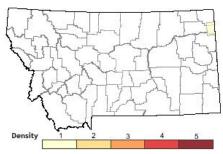
AGENCY STATUS USFWS: USFS: BLM:

## Yellow-collared Scape Moth - Cisseps fulvicollis <a href="http://FieldGuide.mt.gov/detail\_IILEY3F010.aspx">http://FieldGuide.mt.gov/detail\_IILEY3F010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

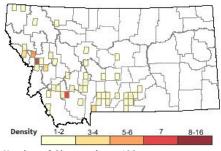
### Shortwing Stone - Claassenia sabulosa

http://FieldGuide.mt.gov/detail\_IIPLE1Z010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 106$ 

### **General Description**

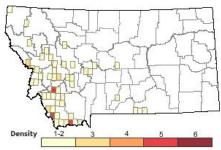
This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams.

## A Riffle Beetle - Cleptelmis addenda http://FieldGuide.mt.gov/detail\_IICOLGY010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

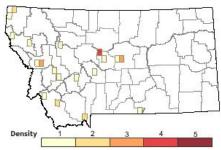


## A Riffle Beetle - *Cleptelmis ornata* <a href="http://FieldGuide.mt.gov/detail\_IICOLGY020.aspx">http://FieldGuide.mt.gov/detail\_IICOLGY020.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### A Caddisfly - Clistoronia formosa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRIC5030.aspx}}$ 



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Caddisfly - Clistoronia magnifica

http://FieldGuide.mt.gov/detail\_IITRI64620.aspx



Global Rank: G5 State Rank: SNR

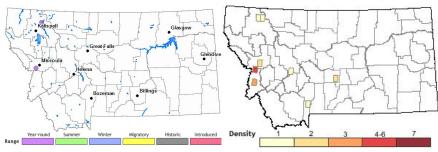
AGENCY STATUS USFWS: USFS: BLM:

## Glossy Pillar - Cochlicopa lubrica http://FieldGuide.mt.gov/detail\_IMGAS11010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Prairie Bluet - Coenagrion angulatum

http://FieldGuide.mt.gov/detail\_IIODO70030.aspx

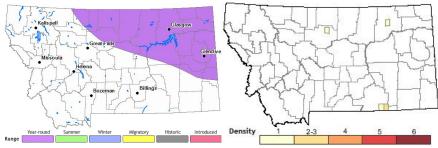


### **Potential Species of Concern**

Global Rank: G5 State Rank: S1S3

AGENCY STATUS USFWS:

USFWS: USFS: BLM:



### Number of Observations: 7

### **General Description**

The Prairie Bluet can be found anywhere in northern and eastern Montana except in the isolated mountains, it is most abundant in June at sun soaked prairie sloughs, marshes and slow streams. Like other Bluets, the Prairie Bluet is a vivid blue with dark markings. Females are less brightly colored. The small prairie bluet (30 mm or ~1in. long) has distinctive patterns that make it relatively easy to identify from other bluets. The blue rings on the abdomen become narrow towards the abdominal tip, which is bright blue. The bottom halves of the bulging eyes are green. A small black crescent shaped marking on the dorsal surface of the second abdominal segment should verify. Females are usually yellowish or greenish. Like all members of its family, the Prairie Bluet is a weak flier and rests horizontally with wings folded over the abdomen.

### Habitat

Prairie ponds, sloughs, and marshes as well as slow-flowing streams are the preferred habitats of the Prairie Bluet. Many of these open sunny wetlands can dry out during the summer months or freeze completely in winter (Westfall and May 1996, Acorn 2004, Paulson 2009).

In Montana, one of only two records was collected at a roadside pool (Miller and Gustafson 1996).

### Subarctic Bluet - Coenagrion interrogatum

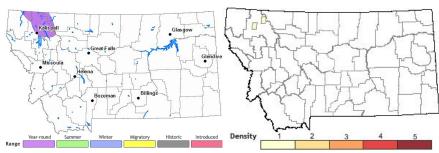
http://FieldGuide.mt.gov/detail\_IIODO70020.aspx



### **Species of Concern**

Global Rank: G5 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 2

### **General Description**

The Subarctic Bluet is much less common than the Taiga Bluet and is very localized rather than widespread. This small bluet inhabitats cool beaver ponds or peat bogs. It can be found in a limited area of Northwest MT in late spring and summer. The small damselfly is 30 mm long (~1 in.) male is black and bright blue. It can be distingished from the Taiga Bluet by the broken shoulder stripe and the abdominal banding. In this Bluet, the blue colour of the stubby hindmost segments extends into the preceding long segment, unlike the all black long segment of the Taiga Bluet. Females may be blue or greenish with narrow light bands on the abdomen. Like all bluets, the Subarctic Bluet is a weak flier and rests horizontally with wings folded over the abdomen.

### Habitat .

The preferred habitat for Subarctic Bluets is open boreal fens and bogs, as well as marshes and beaver ponds with abundant mosses and sedges (Westfall and May 1996, Acorn 2004, Paulson 2009).

### Taiga Bluet - Coenagrion resolutum

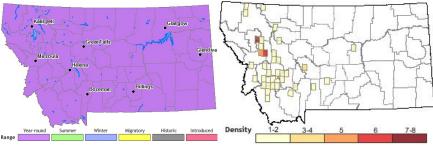
http://FieldGuide.mt.gov/detail\_IIODO70010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 69$ 

### **General Description**

The Taiga Bluet is found at a wide variety of still-water habitats at higher elevations or northern latitudes. It can probably tolerate a colder climate than any other damselfly in Montana. Considering the types of places it is found it emerges very early in the spring.

#### Habitat

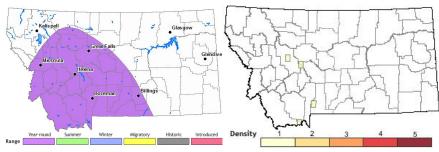
The habitat of the Taiga Bluet includes marshes and fens of sedge, as well as vegetated ponds, spring-fed pools and streams, and sedge beds of large lakes that are mostly semipermanent (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009). Unlike the Prairie Bluet (*Coenagrion angulatum*), which prefers open sunny habitats, the Taiga Bluet selects habitats that are at least partly shaded (Acorn 2004).

## Hayden's Ringlet - Coenonympha haydenii <a href="http://FieldGuide.mt.gov/detail\_IILEPN6010.aspx">http://FieldGuide.mt.gov/detail\_IILEPN6010.aspx</a>



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

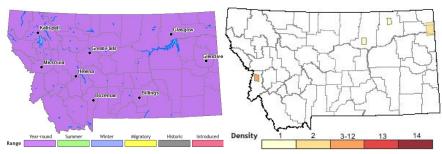


## Common Ringlet - Coenonympha tullia http://FieldGuide.mt.gov/detail\_IILEPN6030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



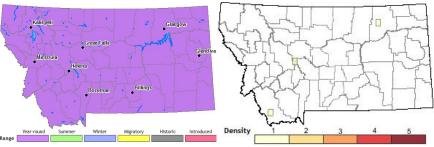
### Queen Alexandra's Sulphur - Colias alexandra

http://FieldGuide.mt.gov/detail\_IILEPA8050.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 3

#### **General Description**

The Queen Alexandra's Sulphur (*Colias Alexandra*) can usually be distinguished by a combination of the following traits: the hindwing underside is quite greenish with no row of dark spots; the hindwing underside has an unbordered, silver discal spot; and the upperside is bright, cold-yellow with no trace of orange (Schmidt no date). The wingspan is about 42 - 57 mm (Opler et al. 2010).

#### Habitat .

Road edges, fields, meadows, sagebrush flats (Opler et al. 2010). It is found only in prairie (rarely in the southern Alberta foothills) grassland habitat (Schmidt no date).

# Christina Sulphur - Colias christina http://FieldGuide.mt.gov/detail\_IILEPA8220.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

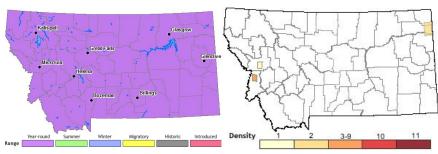


# Orange Sulphur - Colias eurytheme http://FieldGuide.mt.gov/detail\_IILEPA8020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Giant Sulphur - Colias gigantea

http://FieldGuide.mt.gov/detail\_IILEPA8120.aspx



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

Willow bogs.

The Giant Sulphur is a medium sized butterfly (2 - 2 3/4 inches) and can usually be distinguished by a combination of the following traits--Upper surface of male yellow with narrow black borders; lower surface without submarginal black spots. Female with 2 forms, yellow or white; both may have black border reduced or lacking. (Opler et al. 2010) Found mostly in the western mountians of Montana, but also into the Beaverhead and Madison and Yellowstone Ranges.

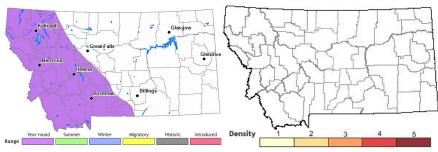
# Habitat .

# Pink-edged Sulphur - Colias interior http://FieldGuide.mt.gov/detail\_IILEPA8140.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Mead's Sulphur - Colias meadii http://FieldGuide.mt.gov/detail\_IILEPA8060.aspx



Global Rank: G4G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



# **Labrador Sulphur - Colias nastes** http://FieldGuide.mt.gov/detail\_IILEPA8100.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

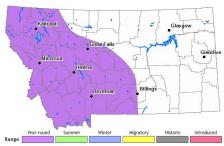
Arctic and alpine tundra.

# Western Sulphur - Colias occidentalis http://FieldGuide.mt.gov/detail\_IILEPA8040.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

# Pelidne Sulphur - Colias pelidne http://FieldGuide.mt.gov/detail\_IILEPA8130.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

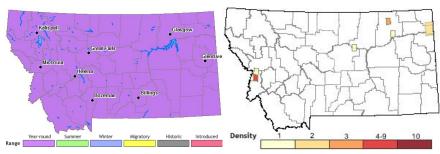
Year-round Summer

# Clouded Sulphur - Colias philodice <a href="http://FieldGuide.mt.gov/detail\_IILEPA8010.aspx">http://FieldGuide.mt.gov/detail\_IILEPA8010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Rocky Mountain Duskysnail - Colligyrus greggi

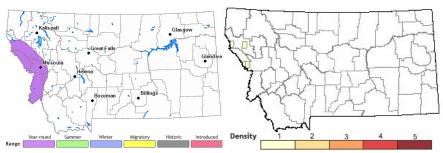
http://FieldGuide.mt.gov/detail\_IMGASF8020.aspx



#### **Species of Concern**

Global Rank: G4 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



#### $\textbf{Number of Observations} \colon 5$

#### **General Description**

A very small, cold-water hydrobiid snail restricted to cold freshwater streams and springs. Both localities known for this species in Utah are rheocrenes, springs flowing from the ground as streams and the Montana sites are small forested streams with extensive groundwater/spring inputs.

#### Habitat

Cold Freshwater Streams and Springs. Both localities known for this species in Utah are rheocrenes, springs flowing from the ground as streams. The temperature at one of the springs was 5 C; at the other locality, the temperature was 8 C and the conductivity was 290 micromhos/cm (Hershler no date). The reported streams in Montana where found are cold (8-12 degrees C), forested, 2-3m wetted width, moderate gradient sites in the pacific refugium part of the state.

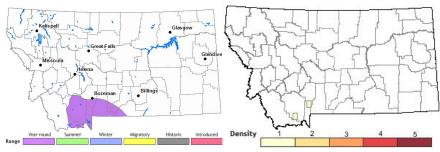
### Mellow Column - Columella columella

http://FieldGuide.mt.gov/detail\_IMGAS13040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

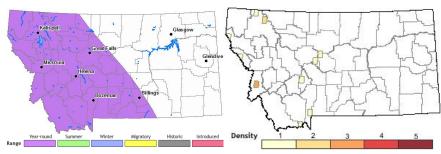


### Toothless Column - Columella edentula <a href="http://FieldGuide.mt.gov/detail\_IMGAS13020.aspx">http://FieldGuide.mt.gov/detail\_IMGAS13020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Bark Beetle - Conophthorus ponderosae <a href="http://FieldGuide.mt.gov/detail\_IICOLZL040.aspx">http://FieldGuide.mt.gov/detail\_IICOLZL040.aspx</a>



Global Rank: GNR State Rank: SU

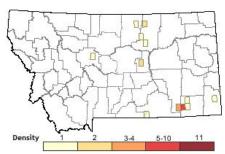
AGENCY STATUS USFWS: USFS: BLM:

# A Predaceous Diving Beetle - Coptotomus longulus <a href="http://FieldGuide.mt.gov/detail\_IICOLYN010.aspx">http://FieldGuide.mt.gov/detail\_IICOLYN010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



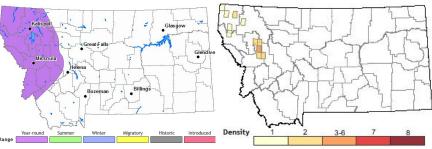
### Pacific Spiketail - Cordulegaster dorsalis

http://FieldGuide.mt.gov/detail\_IIODO03030.aspx



Global Rank: G5 State Rank: S4 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 21$

### **General Description**

This is a large vividly-marked, black and yellow dragonfly with long abdomen, the eyes are smallish and barely touching. They are strong flyers and when perched often hang at a 45° angle. The female has a spikelike ovipositor. This species inhabits lotic systems in western Montana (small woodland streams and rivers). There is only 1 genus and 1 species of this family of dragonflies in NorthWestern North America.

#### Habitat

The habitat of the Pacific Spiketail is clear, shady foothill and mountains streams with either sand or mud substrate and steady current. Away from water this species tends to forage along forest openings and clearings or brushy ravines. Pacific Spiketails often perch on trees and small branches of shrubs for lengthy periods of time (Dunkle 2000, Paulson 2009).

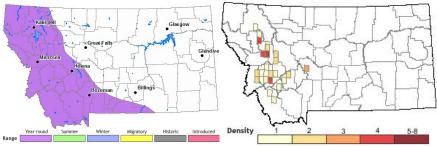
### American Emerald - Cordulia shurtleffii

http://FieldGuide.mt.gov/detail\_IIODO27010.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 47

#### Habitat

The typical habitat of the American Emerald is beaver ponds and boggy lakes and ponds with abundant vegetation, as well as fens and marshes in forested landscapes. This species forages along forested openings and the edges of woodlands, often basking on leaves (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

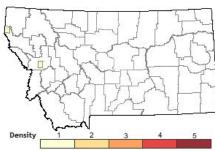
# A Millipede - Corypus cochlearis http://FieldGuide.mt.gov/detail\_ITUNI41010.aspx



### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:

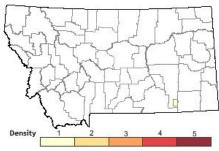


Number of Observations: 2

### A Pyralid Moth - Crambus ainsliellus

http://FieldGuide.mt.gov/detail\_IILER5Z160.aspx





### Number of Observations: 1

### **General Description**

Crambus ainsliellus is a medium sized Crambus (21 - 29 mm wingspan). The forewing is yellowish-brown. The discal silvery stripe is broad, somewhat scimitar shaped, not crossed by dark brown lines and lacks a tooth on the underside of the stripe. The forewing lacks a sinuous white submedial line and a white patch beyond the stripe. The forewing base has a costal brown area that is reduced to a single line. The hindwing is grayish with a dirty white fringe (Powell and Opler, 2009).

C. ainsliellus prefers grassland areas (Powell and Opler, 2009).

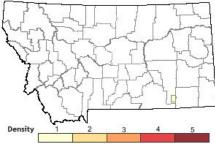
Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Pyralid Moth - Crambus leachellus

http://FieldGuide.mt.gov/detail\_IILE198548.aspx





### Number of Observations: 1

C. leachellus is a moderately large Crambid (25 - 27 mm wingspan) with medium brown forewings that have a wide longitudinal silvery white discal stripe which ends before the subterminal line. This stripe lacks a tooth below and is not cut by an oblique line. The forewings have a triangularly produced apex. There is a row of five dark spots in the subterminal line. The hindwing is smoky white. The cilia of both fore and hind wings are silvery metallic. Males are similar to females (Powell and Opler, 2009).

C. leachellus prefers grassland areas (Powell and Opler, 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

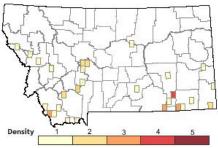
BLM:

# A Cricotopus Chironomid - Cricotopus bicinctus <a href="http://FieldGuide.mt.gov/detail\_IIDIP0H010.aspx">http://FieldGuide.mt.gov/detail\_IIDIP0H010.aspx</a>



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# A Cricotopus Chironomid - Cricotopus nostocicola http://FieldGuide.mt.gov/detail\_IIDIP0H020.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



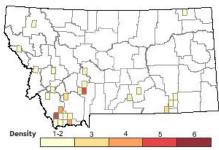
Number of Observations: 1

# A Cricotopus Chironomid - Cricotopus trifascia <a href="http://FieldGuide.mt.gov/detail\_IIDIP0H030.aspx">http://FieldGuide.mt.gov/detail\_IIDIP0H030.aspx</a>



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# A Bark Beetle - Cryphalus ruficollis http://FieldGuide.mt.gov/detail\_IICOLZP010.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Bark Beetle - Cryphalus ruficollis ruficollis <a href="http://FieldGuide.mt.gov/detail\_IICOLZP011.aspx">http://FieldGuide.mt.gov/detail\_IICOLZP011.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

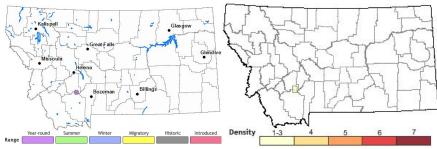
### A Cave Obligate Harvestman - Cryptobunus cavicolus <a href="http://FieldGuide.mt.gov/detail\_ILARAB4010.aspx">http://FieldGuide.mt.gov/detail\_ILARAB4010.aspx</a>



#### **Species of Concern**

Global Rank: G1G2 State Rank: S1S2





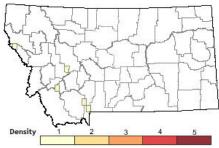
### A Caddisfly - Cryptochia furcata

http://FieldGuide.mt.gov/detail\_IITRI11060.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 6$

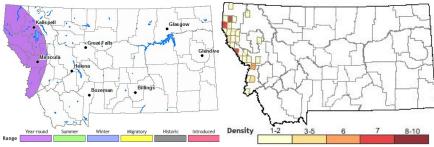
#### Habitat

There is very little ecological information available on this species. According to Wiggins (1996) species of this genus typically inhabit clear, cool creeks, and the known locations in MT fit this general description, including being steep gradient, cobble/boulder dominated and forested.

### Coeur d'Alene Oregonian - *Cryptomastix mullani* <a href="http://FieldGuide.mt.gov/detail\_IMGAS93050.aspx">http://FieldGuide.mt.gov/detail\_IMGAS93050.aspx</a>



Global Rank: G4 State Rank: S4 AGENCY STATUS USFWS: USFS: BLM:

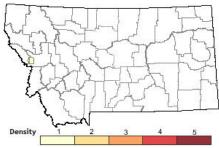


# Kingston Oregonian - *Cryptomastix sanburni* http://FieldGuide.mt.gov/detail\_IMGAS93060.aspx



Global Rank: G1 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# A Bark Beetle - Crypturgus borealis http://FieldGuide.mt.gov/detail\_IICO195392.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Culex Mosquito - Culex pipiens http://FieldGuide.mt.gov/detail\_IIDIP32010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# White Dotted Mosquito - *Culex restuans* http://FieldGuide.mt.gov/detail\_IIDIP32020.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Culiseta Mosquito - Culiseta morsitans http://FieldGuide.mt.gov/detail\_IIDIP7K020.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

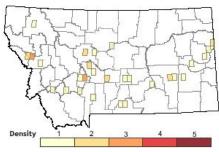
 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Culoptila cantha http://FieldGuide.mt.gov/detail\_IITRID3040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

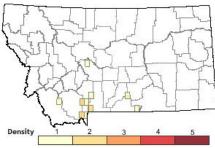


# **Summer Springfly -** *Cultus aestivalis*<a href="http://FieldGuide.mt.gov/detail\_IIPLE2D010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE2D010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# **Vedder Springfly -** *Cultus pilatus*<a href="http://FieldGuide.mt.gov/detail\_IIPLE2D040.aspx">http://FieldGuide.mt.gov/detail\_IIPLE2D040.aspx</a>



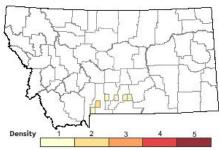
Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Toston Springfly - Cultus tostonus http://FieldGuide.mt.gov/detail\_IIPLE2D050.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 7

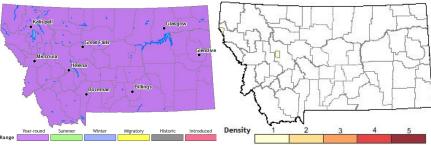
### Western Tailed Blue - Cupido amyntula

http://FieldGuide.mt.gov/detail\_IILEPF9020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 2

#### **General Description**

The Western Tailed Blue (Everes amyntula) has a narrow tail on the hindwing. The upperside of the male is blue, and the upperside of the female is brown with blue at the wing base. The underside is white with black spots that are indistinct or lacking with a single small orange spot near the tail. The wing span is about 22 - 29 mm (Opler et al. 2010).

Mature larvae are variable in color, and range from yellow to green with a dark green or reddish dorsal stripe, pink lateral stripe, and red or pink oblique bands (Layberry et al. 1998).

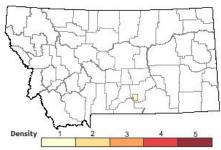
#### Habitat .

Open areas (usually with native plants) with low shrubs including chaparral, meadows, and open woodland (Opler et al. 2010).

# A Caddisfly - Cyrnellus fraternus http://FieldGuide.mt.gov/detail\_IITRIB1010.aspx



Global Rank: G5 State Rank: SNR

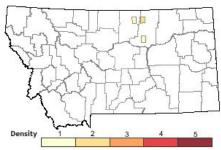


Number of Observations: 1

# Bristletail Clam Shrimp - Cyzicus setosa http://FieldGuide.mt.gov/detail\_ICBRA19070.aspx



Global Rank: G5Q State Rank: SNR



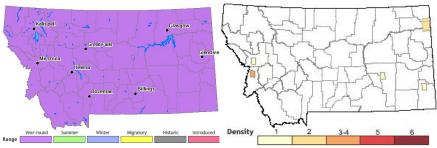
Number of Observations: 4

# Monarch - Danaus plexippus http://FieldGuide.mt.gov/detail\_IILEPP2010.aspx



Global Rank: G5 State Rank: S4B

AGENCY STATUS USFWS: USFS: BLM:



 ${\bf Number\ of\ Observations}\colon 9$ 

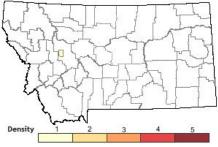
#### **General Description**

A large orange butterfly that flies with its wings held in a  $\mbox{\rm 'V'}$  shape.

### Red-winged Wave - Dasyfidonia avuncularia

http://FieldGuide.mt.gov/detail\_IILEU0J010.aspx





#### Number of Observations: 1

#### **General Description**

The Red-winged Wave (Dasyfidonia avuncularia) is a colorful day-flying moth, occasionally mistaken for a butterfly when flying. The forewing is chocolate brown with a whitish submarginal shade, and black postmedial, antemedial and median lines. The hindwing is bright reddish orange with two bold black transverse lines and fine black striations. The wingspan is about 25 mm (Anweiler and Schmidt 2003).

The larvae are red-brown with shades of pink and have a broken yellow spiracular band (Powell and Opler 2009).

The Red-winged Wave is found in open conifer forests and sagebrush habitats (Powell and Opler 2009).

Global Rank: G4? State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### Western Pine Beetle - Dendroctonus brevicomis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOL6U090.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# **Lodgepole Pine Beetle -** *Dendroctonus murrayanae* <a href="http://FieldGuide.mt.gov/detail\_IICOL6U040.aspx">http://FieldGuide.mt.gov/detail\_IICOL6U040.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### Mountain Pine Beetle - Dendroctonus ponderosae

http://FieldGuide.mt.gov/detail\_IICOL6U020.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# **Douglas-Fir Beetle -** *Dendroctonus pseudotsugae* <a href="http://FieldGuide.mt.gov/detail\_IICOL6U100.aspx">http://FieldGuide.mt.gov/detail\_IICOL6U100.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Allegheny Spruce Beetle - *Dendroctonus punctatus* <a href="http://FieldGuide.mt.gov/detail\_IICOL6U050.aspx">http://FieldGuide.mt.gov/detail\_IICOL6U050.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# Red Turpentine Beetle - *Dendroctonus valens* <a href="http://FieldGuide.mt.gov/detail\_IICOL6U080.aspx">http://FieldGuide.mt.gov/detail\_IICOL6U080.aspx</a>



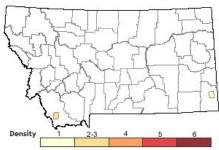
Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Naiadid Worm - *Dero digitata* <a href="http://FieldGuide.mt.gov/detail\_IAPOL08010.aspx">http://FieldGuide.mt.gov/detail\_IAPOL08010.aspx</a>



Global Rank: GNR State Rank: S5

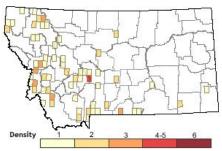


Number of Observations: 4

### Meadow Slug - Deroceras laeve

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IMGAS87040.aspx}}$ 





Number of Observations : 93

Global Rank: G5 State Rank: S4

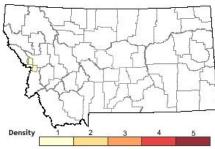
# **Longneck Fieldslug -** *Deroceras panormitanum*<a href="http://FieldGuide.mt.gov/detail\_IMGAS87010.aspx">http://FieldGuide.mt.gov/detail\_IMGAS87010.aspx</a>



**Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



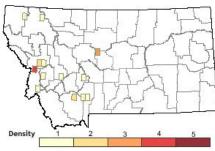
# Gray Fieldslug - *Deroceras reticulatum* <a href="http://FieldGuide.mt.gov/detail\_IMGAS87060.aspx">http://FieldGuide.mt.gov/detail\_IMGAS87060.aspx</a>



#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 20$ 

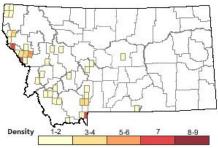
### Smooth Needlefly - Despaxia augusta

http://FieldGuide.mt.gov/detail\_IIPLE0A010.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 95

#### **General Description**

This is a small black stonefly in the family; Leuctridae. Like most of the species in the rolled-winged family, this species hatches early in the year often when snow is still on the ground, where they can be noticed quite easily crawling around along the banks of streams.

#### Habitat .

Ecology: This species inhabits creeks and small rivers but is most common in springs (Baumann, Gaufin, and Surdick 1977).

# A Mountain Midge - *Deuterophlebia coloradensis* <a href="http://FieldGuide.mt.gov/detail\_IIDIPOW010.aspx">http://FieldGuide.mt.gov/detail\_IIDIPOW010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Rosey Dart - *Diarsia rosaria* http://FieldGuide.mt.gov/detail\_IILEYLC060.aspx





Number of Observations: 1

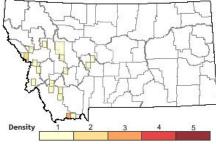
#### **General Description**

The Rosey Dart (Diarsia rosaria) forewing is red-brown often with the discal cell black between the discal spots. The wingspan is 33 mm (Powell and Opler 2009).

Global Rank: G4 State Rank: SNR

# A Caddisfly - *Dicosmoecus atripes* <a href="http://FieldGuide.mt.gov/detail\_IITRI64650.aspx">http://FieldGuide.mt.gov/detail\_IITRI64650.aspx</a>



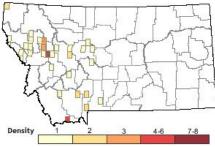


Number of Observations: 23

Global Rank: G5 State Rank: SNR

# A Caddisfly - *Dicosmoecus gilvipes* <a href="http://FieldGuide.mt.gov/detail\_IITRI64660.aspx">http://FieldGuide.mt.gov/detail\_IITRI64660.aspx</a>





 $\textbf{Number of Observations} \colon 52$ 

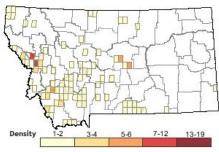
Global Rank: G5 State Rank: SNR

# Hagen's Small Minnow Mayfly - Diphetor hageni http://FieldGuide.mt.gov/detail\_IIEPH63010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Lake Disc - Discus brunsoni

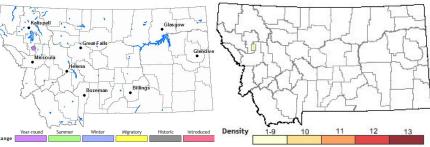
http://FieldGuide.mt.gov/detail\_IMGAS54130.aspx



#### **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 9

#### **General Description**

The following description is taken from Berry (1955). "Shell large for the genus, thin, depressed-conic, with low spire, its slopes weakly convex. Whorls about five and a half, decidedly compressed, moderately rounded both above and below the strongly but not acutely carinate periphery, . . .; base flattened, the widely open vorticiform umbilicus contained about three times in the major diameter of the shell; . . . Aperture transversely ovate, compressed, . . . Color near olive-brown, . . . the basal surface and that of young shells tending to be a little brighter; no inherent variegation of color pattern evident." Maximum diameter of holotype 10.5 mm, minimum diameter 9.1 mm; height of shell 4.2 mm, diameter of umbilicus 3.5 mm. Maximum diameters of eight live individuals measured by Hendricks (1998) ranged from 6.7 mm to 10.5 mm (mean = 9.5 +/- 1.4 mm). Taxanomic Comment: Berry (1955) described this distinctive taxon as a full species. There remain questions regarding its true taxonomic affinities, but complete knowledge will not affect the validity as a full species (see Frest and Johannes 1995).

#### Habitat

Discus brunsoni occupies open, south facing and rather dry talus slopes with very low canopy cover. Vegetation at the margins of the talus slopes includes Douglas-fir (Pseudotsuga menziesii), ponderosa pine (Pinus ponderosa), pockets of water birch (Betula occidentalis), quaking aspen (Populus tremuloides), and mock orange (Philadelphus lewisii). Rock composition at the type locality was described as limestone (Berry 1955, Frest and Johannes 1995), but more recent examination (Hendricks 1998) revealed the occupied talus to be a mix of diorite and argillite with no limestone present. Apparently this species retreats deep into the talus when surface conditions are unfavorable.

#### Striate Disc - Discus shimekii

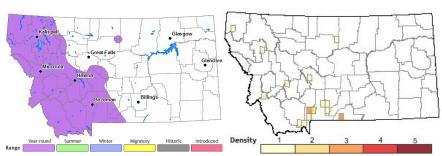
http://FieldGuide.mt.gov/detail\_IMGAS54120.aspx



#### **Species of Concern**

Global Rank: G5 State Rank: S1

**AGENCY STATUS** USFWS: USFS: BLM:



Number of Observations: 20

#### **General Description**

Taxanomic Comment: Originally described from fossil material in Peoria Loess in Iowa. The extant western subspecies, *D. s. cockerelli*, is considered by some authorities to be indistinguishable from the nominate form (Frest and Johannes 1993).

#### Habitat

In the Rocky Mountains it is associated with spruce (Picea) and fir (Abies) intermixed with aspen or other broadleaf trees and shrubs (Beetle 1957, 1997, Karlin 1961, Frest and Johannes 1993). Soils often are derived from weathering limestone. *D. shimeki* is active most often in litter in lowland forest, but sometimes is seen on downed wood and rock surfaces. Slopes are often north-facing and shaded.

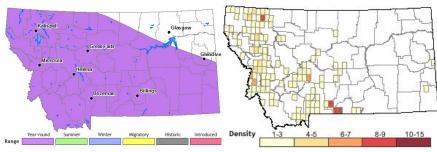
This species tends to be associated with quaking aspen (*Populus tremuloides*) at Montana sites where habitat was documented (Hendricks 2003). Most recently it was found at sites with canopies including Engelmann spruce, Douglas-fir, subalpine fir, and lodgepole pine (Hendricks et al. 2006; 2007), but with scattered aspen also present.

# Forest Disc - *Discus whitneyi* http://FieldGuide.mt.gov/detail\_IMGAS54050.aspx



Global Rank: G5 State Rank: S5

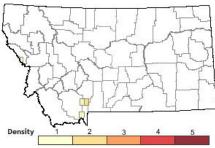
AGENCY STATUS USFWS: USFS: BLM:



# Nearctic Springfly - *Diura knowltoni* <a href="http://FieldGuide.mt.gov/detail\_IIPLE2M020.aspx">http://FieldGuide.mt.gov/detail\_IIPLE2M020.aspx</a>



Global Rank: G5 State Rank: SNR



Number of Observations: 5

# Western Willowfly - Doddsia occidentalis <a href="http://FieldGuide.mt.gov/detail\_IIPLE0W010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0W010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Dolophilodes aequalis http://FieldGuide.mt.gov/detail\_IITRI66810.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Dolophilodes dorcus http://FieldGuide.mt.gov/detail\_IITRI65570.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Dolophilodes novusamericanus <a href="http://FieldGuide.mt.gov/detail\_IITRI65580.aspx">http://FieldGuide.mt.gov/detail\_IITRI65580.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - *Dolophilodes pallidipes* <a href="http://FieldGuide.mt.gov/detail\_IITRI65590.aspx">http://FieldGuide.mt.gov/detail\_IITRI65590.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### Cascades Stone - Doroneuria baumanni

http://FieldGuide.mt.gov/detail\_IIPLE1Q010.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### ${\bf Number\ of\ Observations}\colon 1$

#### **General Description**

Density

This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams.

### Montana Stone - Doroneuria theodora

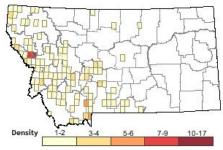
http://FieldGuide.mt.gov/detail\_IIPLE1Q020.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



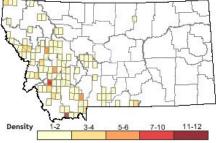
Number of Observations: 207

#### **General Description**

This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams.

# A Mayfly - *Drunella coloradensis* http://FieldGuide.mt.gov/detail\_IIEPH50080.aspx





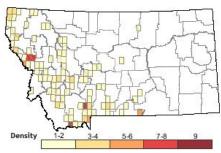
 $\textbf{Number of Observations} \colon 191$ 

Global Rank: G5 State Rank: SNR

### A Mayfly - Drunella doddsii

http://FieldGuide.mt.gov/detail\_IIEPH50090.aspx





Number of Observations: 225

#### **General Description**

Within this mayfly genus are several species known to fly-fisherman as "Green Drakes". The more abundant one is D. grandis, but D. doddsi is shorter and burlier looking. This species has a streamlined, flattened body style and has evolved a suction cup of hairs on the underside of the abdomen to allow it cling to rocks and cobbles in very fast sections of rivers. The adult duns look much like beefy blue-winged olives, with green to olive abdomens and 3 tails, however the body ratio is much shorter. These are fairly common in the fast flowing riffle areas of small, cobble streams to larger trout rivers throughout Montana including the upper Yellowstone and tributaries such as the Boulder River and Smith Creek to upper Missouri River streams such as the Gallatin and Big Hole and thorughout west of the divide streams. Adults hatch in late spring/early summer.

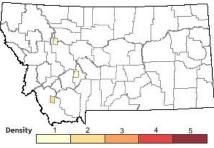
Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS:

BLM:

# A Mayfly - *Drunella flavilinea* http://FieldGuide.mt.gov/detail\_IIEPH50100.aspx



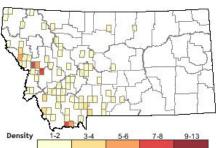


Number of Observations: 4

Global Rank: G5 State Rank: SNR

# A Mayfly - *Drunella grandis* http://FieldGuide.mt.gov/detail\_IIEPH50110.aspx



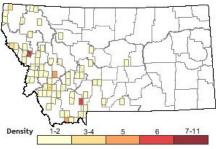


Number of Observations: 152

Global Rank: G5 State Rank: SNR

# A Mayfly - *Drunella spinitera* http://FieldGuide.mt.gov/detail\_IIEPH50130.aspx





Number of Observations: 124

Global Rank: G5 State Rank: SNR

# A Bark Beetle - *Dryocoetes affaber* <a href="http://FieldGuide.mt.gov/detail\_IICOLZT020.aspx">http://FieldGuide.mt.gov/detail\_IICOLZT020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Dryocoetes autographus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZT030.aspx">http://FieldGuide.mt.gov/detail\_IICOLZT030.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Dryocoetes betulae* <a href="http://FieldGuide.mt.gov/detail\_IICOLZT010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZT010.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Dryocoetes confusus* http://FieldGuide.mt.gov/detail\_IICOLZT040.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Dryocoetes sechelti* <a href="http://FieldGuide.mt.gov/detail\_IICOLZT050.aspx">http://FieldGuide.mt.gov/detail\_IICOLZT050.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ecclisomyia conspersa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI64680.aspx}}$ 



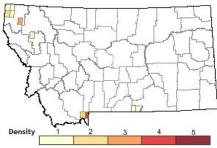
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - *Ecclisomyia maculosa* http://FieldGuide.mt.gov/detail\_IITRI64690.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 16

# A Mayfly - *Ecdyonurus criddlei* <a href="http://FieldGuide.mt.gov/detail\_IIEPH73060.aspx">http://FieldGuide.mt.gov/detail\_IIEPH73060.aspx</a>



Global Rank: G5 State Rank: SNR

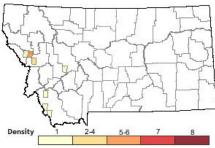
AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - *Ecdyonurus simplicioides* <a href="http://FieldGuide.mt.gov/detail\_IIEPH73130.aspx">http://FieldGuide.mt.gov/detail\_IIEPH73130.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Reakirt's Blue - *Echinargus isola* http://FieldGuide.mt.gov/detail\_IILEPF8030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Tapeworm - Echinococcus granulosus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IPCES01010.aspx}}$ 



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### Number of Observations: 0

E. granulosus typically infects domestic dogs or wolves as a definitive host, and wild or domestic ungulates as the intermediate host.

## A Tapeworm - Echinococcus multilocularis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IPCER01020.aspx}}$ 



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number	of	Observations:	0

Echinococcus multilocularis primarily infects foxes, coyotes, or wolves as a definitive host, and rodents as an intermediate host.

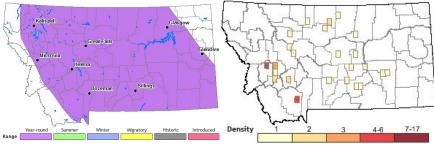
## River Bluet - Enallagma anna

http://FieldGuide.mt.gov/detail\_IIODO71280.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 50$ 

#### General Description

The River Bluet is the only species of *Enallagma* that is restricted to streams and rivers. Other bluets are more commonly associated with lakes and ponds (Acorn 2004, Paulson, 2009) They prefer slow streams and small rivers mostly in open country, but having a riparian component. These habitat types are often associated with outflow of warm springs.

#### Habitat

River Bluets prefer slow streams and small rivers mostly in open country but having a riparian component. These habitat types are often associated with outflow of warm springs. This species has also been known to occupy irrigation canals with appropriate vegetation and flow (Westfall and May 1996, Acorn 2004, Paulson 2009).

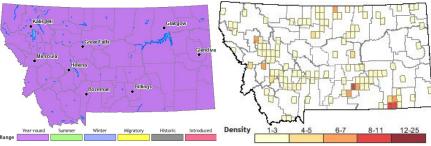
#### Northern Bluet - Enallagma annexum

http://FieldGuide.mt.gov/detail\_IIODO71150.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 298

#### **General Description**

The northern bluet is perhaps our most widespread and abundant damselfly seemingly found in all aquatic habitats, except acidic or saline water conditions. Northern Bluet habitat consists of well-vegetated marshes, bog ponds, vernal pools, ponds, lakes, and sometimes slow-flowing streams, especially in the prairies. It is very similar in appearance to the boreal bluet and may even co-occur, one must use the male claspers (genetalia) to seperate the 2 species. Boreal bluets are more alkaline tolerant and will replace the northern bluets in alkali lakes or Great Plains Saline Depression Wetlands.

#### Habitat

Northern Bluet habitat consists of well-vegetated marshes, bog ponds, vernal pools, ponds, lakes, and sometimes slow-flowing streams. This species tends to avoid acid or saline waters (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

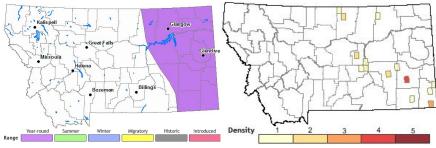
## Rainbow Bluet - Enallagma antennatum

http://FieldGuide.mt.gov/detail\_IIODO71100.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 22

#### Habita

The habitat of the Rainbow Bluet includes slow streams and rivers with abundant vegetation as well as lakes with stream inlets and outlets and ponds along streamcourses (Westfall and May 1996, Paulson 2009).

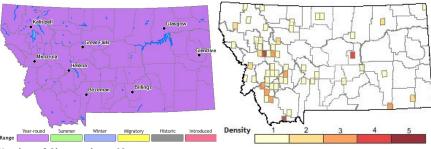
## Boreal Bluet - Enallagma boreale

http://FieldGuide.mt.gov/detail\_IIODO71010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 82

#### Habitat

Boreal Bluets can be present in a variety of habitats including fishless ponds and lakes, open marshes, peatland pools and slow streams, all with abundant emergent vegetation. This species is quite tolerant of alkaline, salty conditions (Westfall and May 1996, Acorn 2004, Paulson 2009).

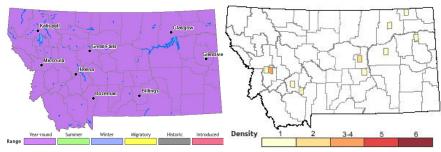
## Tule Bluet - Enallagma carunculatum

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIODO71050.aspx}}$ 



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 14$ 

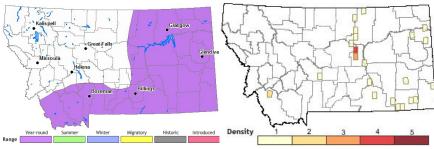
#### Hahitat

The habitat of the Tule Bluet includes marshy and open lakes, prairie reservoirs, ponds and pools as well as slow reaches of streams and rivers. This species is moderately tolerant of saline conditions (Westfall and May 1996, Acorn 2004, Paulson 2009).

## Familiar Bluet - Enallagma civile

http://FieldGuide.mt.gov/detail\_IIODO71130.aspx





#### Number of Observations: 28

#### Habitat

The Familiar Bluet is common in a wide variety of habitats including vegetated lakes and ponds, marshes, slow sluggish streams and even river margins where emergent vegetation is present. Familiar Bluets are quite tolerant of different environemental conditions. They can be found in saline habitats and are also known to quickly colonize newly created wetlands (Westfall and May 1996, Nikula et al. 2002, Paulson 2009).

#### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S4

## Alkali Bluet - Enallagma clausum

http://FieldGuide.mt.gov/detail\_IIODO71290.aspx



#### Number of Observations: 6

The Alkali Bluets habitat preferences include saline and alkaline, as well as freshwater lakes and ponds and large rivers with or without emergent vegetation. In the west, this species can be found in habitats too alkaline for any other odonate to occupy (Westfall and May 1996, Acorn 2004, Paulson 2009).

#### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S4

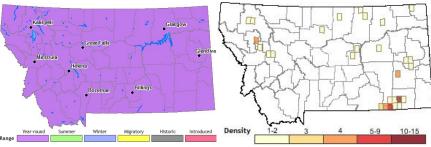
## Marsh Bluet - Enallagma ebrium

http://FieldGuide.mt.gov/detail\_IIODO71200.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 68

#### Habitat

The habitat preference for Marsh Bluets includes well-vegetated marshes, ponds, and lakes, as well as slow streams. However, this species is not tolerant of acid conditions. Marsh Bluets apparently do well in lakes and ponds where fish are present. However, these lakes are usually "wintered killed" and only a few fish survive each winter and therefore overall numbers are quite low (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

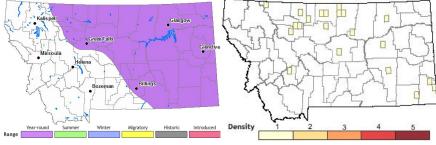
## Hagen's Bluet - Enallagma hageni

http://FieldGuide.mt.gov/detail\_IIODO71230.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 21

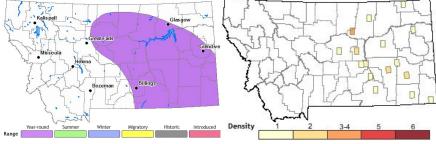
#### Habitat

The habitat of Hagen's Bluets include marshes, lakes, ponds, including open bog ponds, as well as slow streams. This species tends to occur in more acid waters (Westfall and May 1996, Acorn 2004, Paulson 2009).

# Arroyo Bluet - *Enallagma praevarum* <a href="http://FieldGuide.mt.gov/detail\_IIOD071340.aspx">http://FieldGuide.mt.gov/detail\_IIOD071340.aspx</a>



# © Nate Kohler



Number of Observations: 22

The habitat of Arroyo Bluets includes slow streams, lakes and ponds as well as impoundments (Westfall and May 1996, Paulson 2009).

#### **Potential Species of Concern**

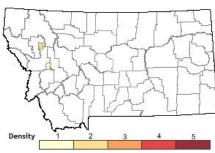
Global Rank: G5 State Rank: S3S5

# A Millipede - Endopus parvipes http://FieldGuide.mt.gov/detail\_ITUN191010.aspx



#### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3



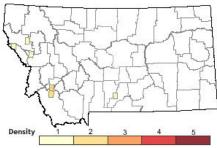
Number of Observations: 3

# $\begin{tabular}{ll} \textbf{Northern Rocky Mountains Refugium Caddisfly - } \textbf{\textit{Eocosmoecus schmidi}} \\ \underline{\textbf{http://FieldGuide.mt.gov/detail\_IITRIE4020.aspx}} \end{tabular}$



Global Rank: G4 State Rank: SNR

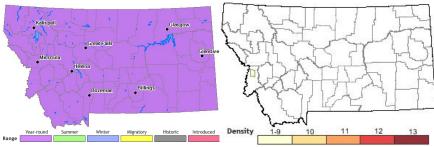
AGENCY STATUS USFWS: USFS: BLM:



# **Silver-spotted Skipper -** *Epargyreus clarus* <a href="http://FieldGuide.mt.gov/detail\_IILEP04020.aspx">http://FieldGuide.mt.gov/detail\_IILEP04020.aspx</a>



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:

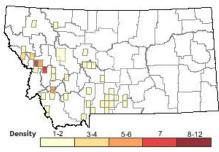


# A Mayfly - *Epeorus albertae* http://FieldGuide.mt.gov/detail\_IIEPH43080.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

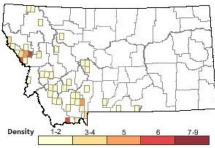


# A Mayfly - *Epeorus deceptivus* http://FieldGuide.mt.gov/detail\_IIEPH43090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

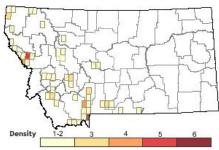


# A Mayfly - *Epeorus grandis* http://FieldGuide.mt.gov/detail\_IIEPH43120.aspx



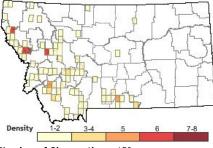
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - *Epeorus longimanus* http://FieldGuide.mt.gov/detail\_IIEPH43150.aspx



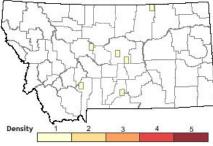


Number of Observations: 150

Global Rank: G5 State Rank: SNR

# A Mayfly - *Ephemera simulans* http://FieldGuide.mt.gov/detail\_IIEPH12050.aspx





Number of Observations: 6

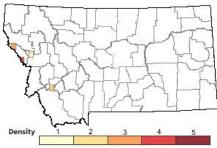
Global Rank: G5 State Rank: SNR

# A Mayfly - Ephemerella alleni http://FieldGuide.mt.gov/detail\_IIEPH11190.aspx



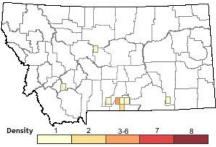
Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Ephemerella aurivillii http://FieldGuide.mt.gov/detail\_IIEPH11110.aspx





Number of Observations: 15

Global Rank: G5 State Rank: SNR

# A Mayfly - *Ephemerella dorothea* <a href="http://FieldGuide.mt.gov/detail\_IIEPH11040.aspx">http://FieldGuide.mt.gov/detail\_IIEPH11040.aspx</a>



Global Rank: G5 State Rank: SNR

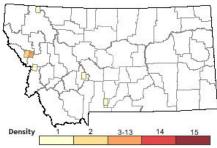
AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - Ephemerella dorothea infrequens http://FieldGuide.mt.gov/detail\_IIEPH11260.aspx



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

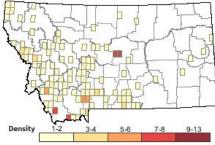


# A Mayfly - Ephemerella excrucians http://FieldGuide.mt.gov/detail\_IIEPH11120.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

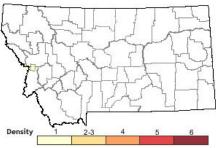


# A Mayfly - Ephemerella mucronata http://FieldGuide.mt.gov/detail\_IIEPH11310.aspx

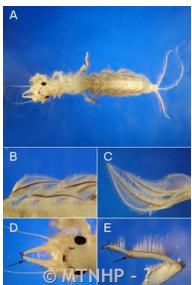


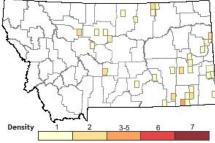
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - *Ephoron album* http://FieldGuide.mt.gov/detail\_IIEPH69010.aspx





Number of Observations: 44

Global Rank: G5 State Rank: SNR

## A Freshwater Sponge - Ephydatia cooperensis

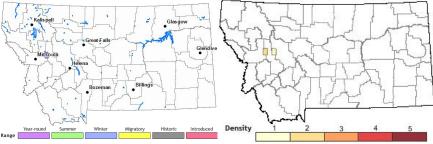
http://FieldGuide.mt.gov/detail\_IZSPN14010.aspx



#### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 3

#### Habitat

Although sponges are multi-cellular invertebrates, they are sometimes mistaken for aquatic plants or algae. Most freshwater sponges are delicate in structure, growing as encrusting or branching masses. They sometimes appear greenish because of the algae that live on them, although living beneath cobbles or other substrate will limit algae growth and remain lighter colored (see photo). Ephydatia cooperensis occurs on the undersides rocks and logs in cool western Montana natural lakes at depths ranging from 37-80 cm (Peterson and Addis 2000).

## Spiny Baskettail - Epitheca spinigera

http://FieldGuide.mt.gov/detail\_IIODO29080.aspx



### Number of Observations: 9

### Habitat

Marshy lakes and ponds including beaver ponds and boggy ponds as well as small streams are the habitats preferred by Spiny Baskettails. This species is tolerant of acidic conditions. Spiny Baskettails also use clearings for foraging sometimes at great distances from breeding sites. (Dunkle 2000, Paulson 2009).

#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

## Colorado Alpine - Erebia callias

http://FieldGuide.mt.gov/detail\_IILEPN8100.aspx



#### **Potential Species of Concern**

Global Rank: G4 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 0

The Colorado Skipper upperside is dull gray-brown with a slight luster. Forewing above and below has 2 eyespots near the tip, usually in a red patch. Underside of hindwing is silver-gray with tiny dark markings.

#### Habitat \_

Alpine grassy meadows potentially with sedges.

## Red-disked Alpine - Erebia discoidalis

http://FieldGuide.mt.gov/detail\_IILEPN8060.aspx



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

#### **General Description**

The Red-disked Alpine is a butterfly of acidic soils and grassy bogs. Currently known only from Glacier, but probably occurs in other mountain ranges. Wings are brownish black and lack eyespots. Forewing has a large chestnut red patch both above and below. Underside of hindwing is mottled gray and brown.

#### Habitat .

Large, open, grassy bogs; other areas with acidic soils.

## Common Alpine - Erebia epipsodea

http://FieldGuide.mt.gov/detail\_IILEPN8090.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 11

#### **General Description**

The Common Alpine (*Erebia epipsodea*) upperside is brown with a row black submarginal eyespots set in rust-orange patches. The underside is similar, but the underside of the hindwing has a broad, lightly contrasting median band bordered by a lighter grey-brown area. The females have a lighter underside and generally more eyespots (Schmidt 2003). The wing span is about 42 - 51 mm (Opler et al. 2010).

### Habitat .

Moist open grassy fields, meadows, high prairies, open forests.

## Magdalena Alpine - Erebia magdalena

http://FieldGuide.mt.gov/detail\_IILEPN8040.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 0

The Magdlena Alpine is a small (Wing span: 1 3/4 - 2 inches) dark Wood-Nymph (Satyrinae) with wings are black above and below. Found in alpine or subalpine rockslide situations bordered by wet meadows or sedges. Rare in Montana, though undersurveyed because of their alpine habitat.

#### Habitat \_

Grasses and sedges near rockslides at or above treeline

# Yellow Dotted Alpine - *Erebia pawloskii* <a href="http://FieldGuide.mt.gov/detail\_IILEPN8070.aspx">http://FieldGuide.mt.gov/detail\_IILEPN8070.aspx</a>



Global Rank: G5 State Rank: SNR

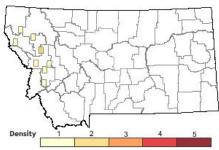
AGENCY STATUS USFWS: USFS: BLM:



# A Millipede - *Ergodesmus compactus* <a href="http://FieldGuide.mt.gov/detail\_ITUNI65020.aspx">http://FieldGuide.mt.gov/detail\_ITUNI65020.aspx</a>



Global Rank: G4G5 State Rank: S4S5



Number of Observations: 9

## Eastern Ringtail - Erpetogomphus designatus

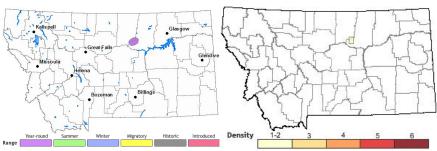
http://FieldGuide.mt.gov/detail\_IIOD006040.aspx



#### **Species of Concern**

Global Rank: G5 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 2

#### Habitat

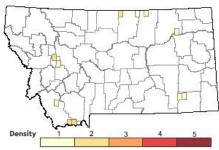
Eastern Ringtails prefer habitats of sandy and gravelly streams and rivers with flow and riffles. Both sexes can be found some distance from breeding sites often perched on the ground, twigs, or even barbed wire of fences (Dunkle 2000, Nikula et al. 2002, Paulson 2009). In Montana, they have only been found at a warm spring (Miller and Gustafson 1996).

# A Leech - *Erpobdella punctata* http://FieldGuide.mt.gov/detail\_IAHIR05010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Afranius Duskywing - Erynnis afranius

http://FieldGuide.mt.gov/detail\_IILEP37160.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

The Afranius Duskywing (*Erynnis afranius*) hindwing fringes are pale-tipped. The upperside is dark brown, and the forewing has abundant pale overscaling with several clear spots. The male has a costal fold containing yellow scent scales. The female has a patch of scent scales on the 7th abdominal segment. The wing span is about 32 - 35 mm (Opler et al. 2010).

### Habitat .

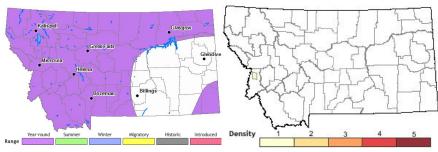
The habitat includes valley sides and coulees in the short-grass prairies, and open woodlands, edges, and openings in forests (Opler et al. 2010).

# **Dreamy Duskywing -** *Erynnis icelus* <a href="http://FieldGuide.mt.gov/detail\_IILEP37010.aspx">http://FieldGuide.mt.gov/detail\_IILEP37010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Juvenal's Duskywing - Erynnis juvenalis <a href="http://FieldGuide.mt.gov/detail\_IILEP37030.aspx">http://FieldGuide.mt.gov/detail\_IILEP37030.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Mottled Duskywing - Erynnis martialis

http://FieldGuide.mt.gov/detail\_IILEP37100.aspx



Global Rank: G3 State Rank: SNA

**AGENCY STATUS** 

USFWS: USFS: BLM:

#### Number of Observations: 0

#### **General Description**

Both sexes are brown dorsally with black patches, lending the butterflies a strongly mottled or banded appearance (Opler and Krizek, 1984). Above and below-light brown with lavender cast; very strong contrasting dark patches on all wings so it appears almost banded; tiny glossy spots on fore wing; brown fringes (Pyle, 1981). Spring or 1st phenotype is smaller (male forewing 1.8-1.9 cm) and lighter (with more white scaling) than summer or 2nd phenotype (male fore wing 2.0-2.1 cm); gray hairs of male dorsal fore wing concentrated on distal 3rd of wing; hyaline spots small and usually absent in fore wing space cu2-2a in both sexes; ventral hind wing lacks subapical white spots (Scott, 1986). Mature larva-light green with white specks and covered with short hair; head is red, yellow or orange pattern. Eggs-pale green, turning pink before hatching (Pyle, 1981).

#### Habitat

Shrubby foothills with stands of Cercocarpus and Ceanothus from 5800' to 8200' (Ferris and Brown 79). Oak woodlands (B81FER01COUS); wooded uplands often on acid soils in east; open woods and thickets; clumps of vegetation on plains (B81PYL01COUS).

# Pacuvius Duskywing - Erynnis pacuvius http://FieldGuide.mt.gov/detail\_IILEP37110.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

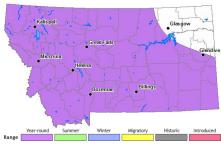


# Persius Duskywing - Erynnis persius http://FieldGuide.mt.gov/detail\_IILEP37170.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

## Western Pondhawk - Erythemis collocata

http://FieldGuide.mt.gov/detail\_IIODO39020.aspx

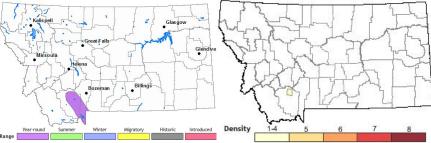


#### **Species of Concern**

Global Rank: G5 State Rank: S1S2

AGENCY STATUS USFWS: USFS:

BLM:



#### Number of Observations: 4

#### **General Description**

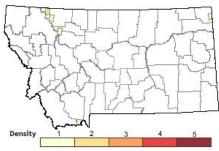
The Western Pondhawk is a medium-sized dragonfly with a green face and pale-dark blue body (males), females have a mostly green thorax with a black abdominal dorsal stripe. Currently in MT, the Western Pondhawk is known only from Potosi Warm Spring in the Tobacco Root Mountains of Madison County. But have been found to prefer habitats of still waters of ponds, lakes, and marshes as well as slow flowing waters of streams and springs (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

Western Pondhawks prefer habitats of still waters of ponds, lakes, and marshes as well as slow flowing waters of streams and springs (Dunkle 2000, Nikula et al. 2002, Paulson 2009). In Montana, this species has so far only found in Potosi hot springs in Tobacco Root Mountains (Miller and Gustafson 1996)

# Smoothlip Fairy Shrimp - Eubranchipus intricatus <a href="http://FieldGuide.mt.gov/detail\_ICBRA01020.aspx">http://FieldGuide.mt.gov/detail\_ICBRA01020.aspx</a>



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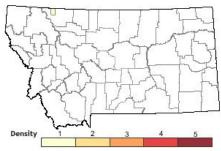
Number of Observations: 6

Global Rank: G4 State Rank: SNR

# Ornate Fairy Shrimp - *Eubranchipus ornatus* <a href="http://FieldGuide.mt.gov/detail\_ICBRA01090.aspx">http://FieldGuide.mt.gov/detail\_ICBRA01090.aspx</a>



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Number of Observations:  ${\bf 1}$ 

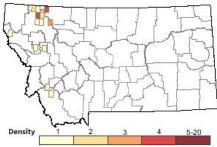
Global Rank: G3 State Rank: SNR

# Ethologist Fairy Shrimp - Eubranchipus serratus <a href="http://FieldGuide.mt.gov/detail\_ICBRA01050.aspx">http://FieldGuide.mt.gov/detail\_ICBRA01050.aspx</a>





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Number of Observations: 39

## Shorttailed Snowfly - Eucapnopsis brevicauda

http://FieldGuide.mt.gov/detail\_IIPLE04010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Number of Observations: 0

#### **General Description**

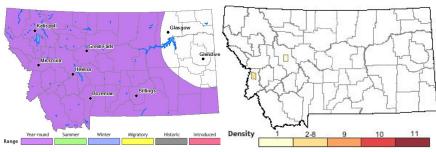
Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

# Large Marble - Euchloe ausonides http://FieldGuide.mt.gov/detail\_IILEPA5010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



## Northern Marble - Euchloe creusa

http://FieldGuide.mt.gov/detail\_IILEPA5020.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

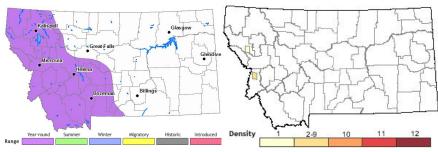
Mountains, rocky outcrops, trails, roadsides.

# California Marble - *Euchloe hyantis* <a href="http://FieldGuide.mt.gov/detail\_IILEPA5030.aspx">http://FieldGuide.mt.gov/detail\_IILEPA5030.aspx</a>



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Desert Marble - Euchloe lotta

http://FieldGuide.mt.gov/detail\_IILEPA5070.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

# Olympia Marble - *Euchloe olympia* <a href="http://FieldGuide.mt.gov/detail\_IILEPA5040.aspx">http://FieldGuide.mt.gov/detail\_IILEPA5040.aspx</a>



Global Rank: G4G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 4

Density

## Brown Hive - Euconulus fulvus

http://FieldGuide.mt.gov/detail\_IMGAS70020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



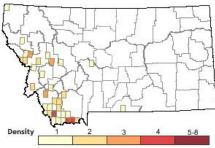
## A Eukiefferiellan Chironomid - Eukiefferiella brehmi

http://FieldGuide.mt.gov/detail\_IIDIP0R010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

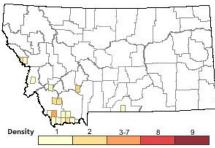


# A Eukiefferiellan Chironomid - Eukiefferiella claripennis <a href="http://FieldGuide.mt.gov/detail\_IIDIPOR020.aspx">http://FieldGuide.mt.gov/detail\_IIDIPOR020.aspx</a>



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



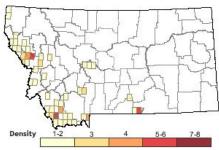
## A Eukiefferiellan Chironomid - Eukiefferiella devonica

http://FieldGuide.mt.gov/detail\_IIDIP0R030.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

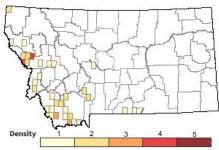


# A Eukiefferiellan Chironomid - Eukiefferiella gracei <a href="http://FieldGuide.mt.gov/detail\_IIDIPOR040.aspx">http://FieldGuide.mt.gov/detail\_IIDIPOR040.aspx</a>



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

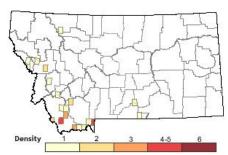


# A Eukiefferiella Fly - Eukiefferiella pseudomontana <a href="http://FieldGuide.mt.gov/detail\_IIDIPOR050.aspx">http://FieldGuide.mt.gov/detail\_IIDIPOR050.aspx</a>



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

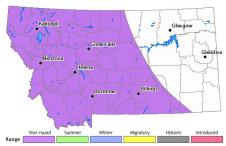


# Rocky Mountain Dotted Blue - *Euphilotes ancilla* <a href="http://FieldGuide.mt.gov/detail\_IILEPG2110.aspx">http://FieldGuide.mt.gov/detail\_IILEPG2110.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# **Square-spotted Blue -** *Euphilotes battoides*<a href="http://FieldGuide.mt.gov/detail\_IILEPG2010.aspx">http://FieldGuide.mt.gov/detail\_IILEPG2010.aspx</a>



Global Rank: G5 State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:



### Anicia Checkerspot - Euphydryas anicia

http://FieldGuide.mt.gov/detail\_IILEPK4070.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 2$

### **General Description**

The upperside of the Anicia Checkerspot (*Euphydryas anicia*) is checkered in orange-red and cream with black lines and spot-rows. The underside has a similar pattern but with very little black (Schmidt 2003).

### Habitat \_

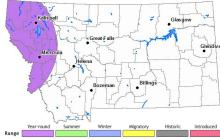
No Habitat requirements are known.

# Variegated Checkerspot - *Euphydryas chalcedona* <a href="http://FieldGuide.mt.gov/detail\_IILEPK4030.aspx">http://FieldGuide.mt.gov/detail\_IILEPK4030.aspx</a>



Global Rank: G5 State Rank: S4S5



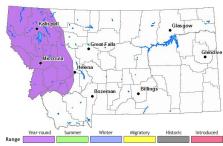


# Snowberry Checkerspot - *Euphydryas colon* <a href="http://FieldGuide.mt.gov/detail\_IILEPK4020.aspx">http://FieldGuide.mt.gov/detail\_IILEPK4020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

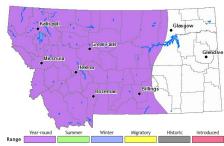


# Edith's Checkerspot - Euphydryas editha <a href="http://FieldGuide.mt.gov/detail\_IILEPK4050.aspx">http://FieldGuide.mt.gov/detail\_IILEPK4050.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Gillette's Checkerspot - Euphydryas gillettii

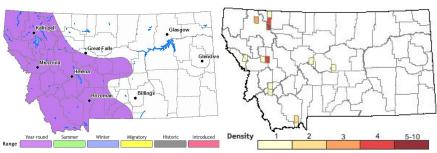
http://FieldGuide.mt.gov/detail\_IILEPK4010.aspx



### **Species of Concern**

Global Rank: G3 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 34

### **General Description**

Gillett's checkerspot is a striking butterfly with a distinctive orange-red submarginal band across the predominately dark-brown to black wings. It may be found in a variety of damp habitats in mountains, including open, moist conifer forests, moist meadows, and streamsides. Gillett's checkerspot is rare throughout its range (southeast British Columbia, southwest Alberta, Montana, eastern Idaho, and western Wyoming). It usually occurs as widely scattered, isolated colonies. Its habitat is prone to disturbance by grazing.

### Habitat

Open, moist conifer forests; moist meadows; streamsides. Note from Norbert Kondla, biologist in BC, in 2004, pertaining presumably to Alberta and BC: "This year I found that it is quite adaptable and found it breeding in cutblocks, including one that had just been harvested the previous season."

# **Dun Skipper - Euphyes vestris** http://FieldGuide.mt.gov/detail\_IILEP77100.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

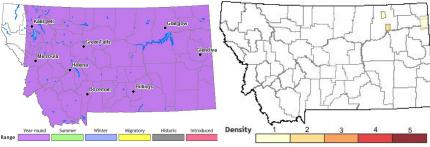


# Variegated Fritillary - *Euptoieta claudia* <a href="http://FieldGuide.mt.gov/detail\_IILEPJ5010.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ5010.aspx</a>



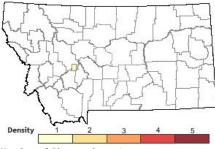
Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# White-striped Dart - Euxoa albipennis http://FieldGuide.mt.gov/detail\_IILEYKV350.aspx





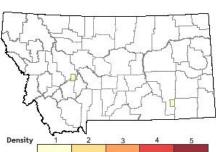
Number of Observations: 1

Global Rank: G4G5 State Rank: SNR

### Army Cutworm - Euxoa auxiliaris

http://FieldGuide.mt.gov/detail\_IILEYKV0W0.aspx





### Number of Observations: 2

### **General Description**

The Army Cutworm Moth (*Euxoa auxiliaris*) is a fairly large (40 - 45 mm wingspan) grey-brown moth. It is one of the largest moths in the *Euxoa* genus. There are several forms of adults. The most common has a black basal dash, black between the orbicular and reniform spot, a contrasting paler grey or yellow costa and a pale streak beyond the claviform spot. A less common form has an evenly-colored pale grey or pale brown forewing. Yet another form has dark brown forewings with white outlined reniform and orbicular spots (Anweiler 2003).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

The larvae is up to 40 mm long. It has a light brownish-gray head with pale brown spots. The body is pale grayish with white splotches and a brown-tinged top line. The lower portion of the body has darker, top-lateral stripes and an indistinct band of white splotches. The larvae curl up into a tight "C" when disturbed (Anweiler 2003).

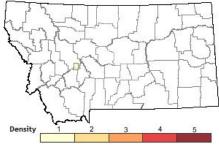
### Habitat

Grasslands, croplands, meadows and other open habitats, including alpine (Anweiler 2003).

### Scarred Dart - Euxoa cicatricosa

http://FieldGuide.mt.gov/detail\_IILEYKV430.aspx





### Number of Observations: 1

### **General Description**

The Scarred Dart (*Euxoa cicatricose*) is a medium-size (29-32 mm wingspan) streaky grey and yellow-brown moth. The head and thorax are yellow-brown and grey. The prothoracic collar is edged with pale scales and the tegulae is trimmed with scattered black scales. The forewings are yellow-brown or grey brown with lighter streaks, in particular the subterminal area. The costa, the spots, and the area distal to the claviform are pale yellow or orange-brown. The orbicular spot is round. Veins CUI and M3 are pale-edged and projecting to the wing margin. There is a small black basal dash that is reduced to a few black scales in many specimens. The fringe is dark. The hindwings are white, with sooty brown scaling on the veins and forming a wide diffuse terminal band. The fringe is white. The male antennae is moderately bifasciculate (Anweiler 2003).

### Habitat \_

The Scarred Dart is generally found in arid areas with sparse vegetation and loose granular soils (Anweiler 2003).

Global Rank: GNR State Rank: SNR

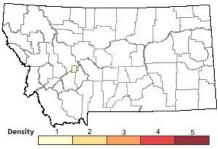
AGENCY STATUS USFWS: USFS:

BLM:

### Yellow-collared Dart - Euxoa flavicollis

http://FieldGuide.mt.gov/detail\_IILEYKV4U0.aspx





### ${\bf Number\ of\ Observations}\colon 1$

### **General Description**

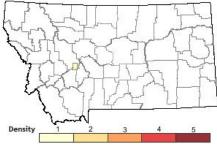
The Yellow-collared Dart (*Euxoa flavicollis*) is a medium-size (30-34 mm wingspan) moth with dark brown forewings, with a pale yellow-brown, ochre, or dull orange costa. The cubital vein is shaded with white scales for the same distance. The dark filled orbicular and kidney-shaped reniform spots are relatively small and outlined in the same pale yellow or orange scales. There is a narrow yellow or orange streak beyond the claviform spot. The hindwings are suffused with sooty or brown scales, darkest towards the outer margin (Anweiler 2007).

Global Rank: GNR State Rank: SNR

### Darksided Cutworm - Euxoa messoria

http://FieldGuide.mt.gov/detail\_IILEYKV040.aspx





### Number of Observations: 1

### **General Description**

The dark-sided cutworm (*Euxoa messoria*) is a medium-size (32-36 mm wingspan) brownish-grey moth. The male antennae are strongly biserrate and bifasculate, and the female antennae are simple. The head and thorax are even grey-brown without a contrasting prothoracic collar. The basal, antemedian and postmedian lines on the forewings are usually well marked and doubled, the later narrowly toothed at the veins. The orbicular and reniform spots are well defined, with the orbicular being a large oval. A median line or shade is often present. The terminal area is narrowly darker than the remainder of the wing. The fringe is concolorous with the wing. The hindwing is white in the male with shading to light smoky-brown on the margin, and more extensively dark-shaded in females. There is a small discal dot, the veins are narrowly lined with brown scales, and the fringe is mostly white (Anweiler 2003, Crumb 1956, and Lafontaine 1987).

The larvae has longitudinal pale brown and dark brown stripes (Powell and Opler 2009).

### Habitat .

Open areas such as grasslands, cultivated areas and clearings (Anweiler et al. no date).

Global Rank: GNR State Rank: SNR

### Obelisk Dart - Euxoa obeliscoides

http://FieldGuide.mt.gov/detail\_IILEYKV3F0.aspx



# Density

### Number of Observations: 1

### **General Description**

The Obelisk Dart (Euxoa obeliscoides) is a medium-size moth (36-39 mm wingspan). The head and body are light brown, with a fine dark grey band on the prothoracic shield and along the edges of the tegulae. The forewing costa is cream-colored and contrasts strongly with the brown forewing. There is a short, thick black basal dash, and the antemedian and postmedian lines are narrow and black, with the later slightly scalloped at the veins. The large, rectangular reniform, and the orbicular and claviform spots are outlined in black, with the first two filled with cream-colored scales like the costa. The area beyond the postmedian line is slightly paler than the rest of the wing, but darkens toward the outer margin. The lower half of the basal half of the wing is darker grey or grey brown. The fringe is pale brown. The hindwings are light smoky brown, darker toward the margin with bream or white fringes (Anweiler 2003).

The Obelisk Dart is a fairly common and widespread species of the sandy boreal pine forest, dry aspen parklands, and riparian cottonwood stands in the grasslands (Anweiler 2003).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

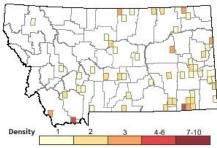
BLM:

# A Mayfly - Fallceon quilleri http://FieldGuide.mt.gov/detail\_IIEPH81010.aspx



Global Rank: G5 State Rank: SNR

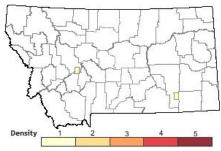
AGENCY STATUS USFWS: USFS: BLM:



### Dingy Cutworm Moth - Feltia jaculifera

http://FieldGuide.mt.gov/detail\_IILEYKN010.aspx





### Number of Observations: 2

### **General Description**

Feltia jaculifera is a complex of probably six or more sibling species, at least two of which occur in Alberta. These cannot by separated to species using normal means. In spite of extensive studies "jaculifera" is still best treated as a single "species" (Anweiler - E.H. Strickland Entomological Museum, University of Alberta). Feltia jaculifera is a medium-size moth (35 - 40 mm wingspan) with dark forewings broken up by a pattern of pale longitudinal streaks and spots. There is a long thick black basal dash, which includes the claviform spot, that is crossed by two narrow lines in the basal half. A pale median streak curves down at the anal angle to meet the one running along the lower margin of the wing. The costa is also pale, and is linked to the top of the pale reniform mad orbicular spots. The subterminal line is a series of pale streaks following the veins. The hindwing varies from white with light fuscous shading along the margin to mostly fuscous, but is usually dirty white with a broad diffuse darker margin (Powell and Opler, 2009).

The Dingy Cutworm Moth is found in open habitats, in particular, native grasslands. It is also found in riparian edges, meadows, and other open areas (Anweiler 2007).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

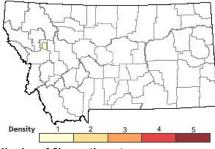
### Fragile Ancylid - Ferrissia fragilis

http://FieldGuide.mt.gov/detail\_IMGASN3010.aspx



Global Rank: G5Q State Rank: SNR AGENCY STATUS USFWS: USFS:

BLM:



### $\textbf{Number of Observations} \colon 1$

### **General Description**

Ferrissia fragilis is a species of small freshwater snail or limpet, an aquatic gastropod mollusk in the family Planorbidae. They are small and conical shaped. Although this species can occur in rivers, it is more commonly found on macrophytes and organic debris in lentic environments (McMahon, 1976; Jokinen, 1978).

### Habitat

Although it can occur in rivers, it is more commonly found on macrophytes and organic debris in lentic environments (McMahon, 1976; Jokinen, 1978).

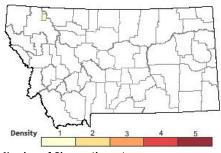
### Oblong Ancylid - Ferrissia parallelus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IMGASN3040.aspx}}$ 



AGENCY STATUS USFWS: USFS: BLM:

Global Rank: G5 State Rank: SNR



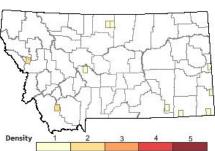
Number of Observations: 1
General Description

Ferrissia parallelus is a species of small freshwater snail or limpet, an aquatic gastropod mollusk in the family Planorbidae. They are small and conical shaped.

### Creeping Ancylid - Ferrissia rivularis

http://FieldGuide.mt.gov/detail\_IMGASN3050.aspx





Number of Observations: 12
General Description

Ferrissia rivularis is a species of small freshwater snail or limpet, an aquatic gastropod mollusk in the family Planorbidae. They are small and conical shaped.

Global Rank: G5Q State Rank: SNR

### Shortface Lanx - Fisherola nuttalli

http://FieldGuide.mt.gov/detail\_IMGASL6010.aspx



**Species of Concern** 

Global Rank: G2 State Rank: SH

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

### **General Description**

Accentric conical shell up to 0.5 inches long, 0.4 inches wide, and 0.2 inches high (Neitzel and Frest 1989). Shell small, solid, roundly ovate, slightly broader posteriorly, high-arched, apex posterior; finely concentrically striate, depressed conic (Hannibal 1912). "Shell coarse, somewhat ponderous, wide, ovate, elevated; lines of growth conspicuous; apex eroded, placed far back: anterior and lateral slopes convex, posterior slope steep and rectilinear. Color opake chesnut-brown. Dimensions: 8mm long, 6.25mm wide, 3 mm high."

### Habitat

Found in cold, unpolluted, well-oxygenated, permanent medium-sized streams to large rivers, at least 30meters and up to 100 meters wide. Habitats are cobble-boulder diatom covered substrate in the main channels, or close to fast-flowing water (rapids), often co-occurring with Fluminicola columbiana (Neitzel and Frest 1989, 1990). This species is not found in areas with a high abundance of macrophytes or epiphytic algae, in areas with a bedrock substrate, or in areas that are dredged or mined (Frest 1999). Fisherola nuttalli occurred primarily in the fastest waters, in a Snake River study and the probability of capturing F. nuttalli increased with increasing conductivity from 300-400 (EC) (Richards et al. 2005). This species feeds by scraping algae and diatoms from rock surfaces in the streams. May occasionally feed on other plant surfaces. Dispersal and movement is by a slow snail-like crawl or can be transported by stream current. Present all year, but not active in winter.

### Columbia Pebblesnail - Fluminicola fuscus

http://FieldGuide.mt.gov/detail\_IMGASG3040.aspx



### **Potential Species of Concern**

Global Rank: G2 State Rank: SH

AGENCY STATUS USFWS: USFS:

BLM:

### Number of Observations: 0

### **General Description**

Fluminicola fuscus formerly known as Fluminicola columbianus is a short spired snail in the family Hydrobiidae (Spring snails) with an operculum that is restricted to medium to large rivers, in swift current on stable gravel to boulder substrate in cold, unpolluted, highly oxygenated water. They have been considered candidate speices for listing under the ESA, but were removed from the list. This species has been extirpated from the middle and upper Columbia River in Washington, Montana, and British Columbia, and may be extinct in the lower Columbia River in Washington and Oregon (Frest and Johannes 1995). Is still extant in some tributaries in Washington.

Restricted to medium to large rivers, in swift current on stable gravel to boulder substrate in cold, unpolluted, highly oxygenated water.

### Prairie Fossaria - Fossaria bulimoides

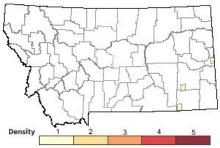
http://FieldGuide.mt.gov/detail\_IMGASL1020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 3

### **General Description**

This tolerant little snail (5-10mm) is common in the prairie regions of eastern Montana in temporary habitats such as stock ponds, prairie stream pools and wetlands. It is able to survive dessication by sealing off its aperature (shell opening) and keeping its internal organs moist while it waits for the next rain pools to form. This species generally does better with aquatic vegetation where it crawls along stems of rushes, cattails, etc. feeds on algae and other attached detritus by scraping it with it radula (toothed mouth).

# **Dusky Fossaria - Fossaria dalli** http://FieldGuide.mt.gov/detail\_IMGASL1060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Marsh Fossaria - Fossaria humilis

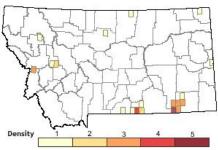
http://FieldGuide.mt.gov/detail\_IMGASL1100.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 38

### **General Description**

This tolerant little snail (5-10mm) is common in the prairie regions of eastern Montana in temporary habitats such as stock ponds, prairie stream pools and wetlands. It is able to survive dessication by sealing off its aperature (shell opening) and keeping its internal organs moist while it waits for the next rain pools to form. This species generally does better with aquatic vegetation where it crawls along stems of rushes, cattails, etc. feeds on algae and other attached detritus by scraping it with it radula (toothed mouth).

### Rock Fossaria - Fossaria modicella

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IMGASL1110.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

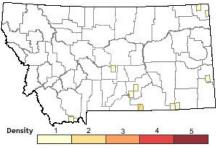
### Golden Fossaria - Fossaria obrussa

http://FieldGuide.mt.gov/detail\_IMGASL1120.aspx



Global Rank: G5 State Rank: SNR

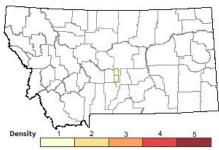
AGENCY STATUS USFWS: USFS: BLM:



# Pygmy Fossaria - *Fossaria parva* http://FieldGuide.mt.gov/detail\_IMGASL1130.aspx



Global Rank: G5 State Rank: SNR

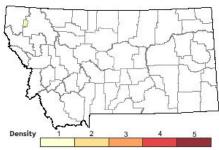


Number of Observations: 2

# Painted Springfly - Frisonia picticeps http://FieldGuide.mt.gov/detail\_IIPLE26010.aspx



Global Rank: G3 State Rank: SNR



Number of Observations: 1

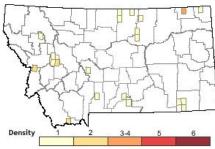
# An Amphipod - Gammarus lacustris http://FieldGuide.mt.gov/detail\_ICMAL10110.aspx



### **Exotic Species** (not native to Montana)

Global Rank: GNR State Rank: SNA

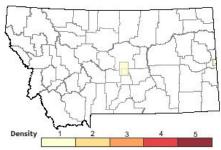
AGENCY STATUS USFWS: USFS: BLM:



# Armed Snaggletooth - Gastrocopta armifera http://FieldGuide.mt.gov/detail\_IMGAS15010.aspx



Global Rank: G5 State Rank: SNR

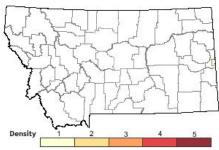


Number of Observations: 2

# **Lambda Snaggletooth -** *Gastrocopta holzingeri*<a href="http://FieldGuide.mt.gov/detail\_IMGAS15090.aspx">http://FieldGuide.mt.gov/detail\_IMGAS15090.aspx</a>



Global Rank: G5 State Rank: SNR



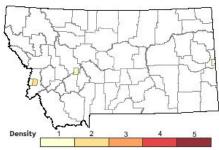
Number of Observations: 1

# Comb Snaggletooth - *Gastrocopta pentodon* http://FieldGuide.mt.gov/detail\_IMGAS15110.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

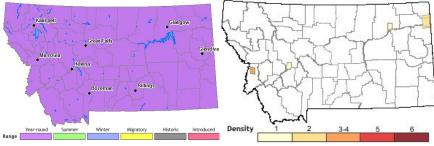


# **Silvery Blue -** *Glaucopsyche lygdamus*<a href="http://FieldGuide.mt.gov/detail\_IILEPG4020.aspx">http://FieldGuide.mt.gov/detail\_IILEPG4020.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

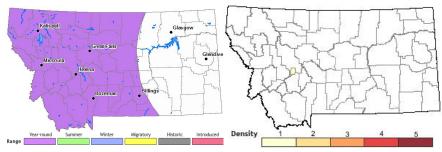


# Arrowhead Blue - Glaucopsyche piasus <a href="http://FieldGuide.mt.gov/detail\_IILEPG4010.aspx">http://FieldGuide.mt.gov/detail\_IILEPG4010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

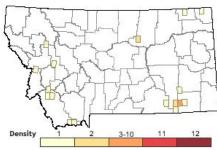


# A Leech - Glossiphonia complanata http://FieldGuide.mt.gov/detail\_IAHIR06010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Glossosoma alascense http://FieldGuide.mt.gov/detail\_IITRI83030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Glossosoma excitum <a href="http://FieldGuide.mt.gov/detail\_IITRI83060.aspx">http://FieldGuide.mt.gov/detail\_IITRI83060.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Glossosoma idaho http://FieldGuide.mt.gov/detail\_IITRI83070.aspx



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Glossosoma intermedium <a href="http://FieldGuide.mt.gov/detail\_IITRI83010.aspx">http://FieldGuide.mt.gov/detail\_IITRI83010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Glossosoma montanum http://FieldGuide.mt.gov/detail\_IITRI66260.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

# A Caddisfly - Glossosoma parvulum <a href="http://FieldGuide.mt.gov/detail\_IITRI66270.aspx">http://FieldGuide.mt.gov/detail\_IITRI66270.aspx</a>



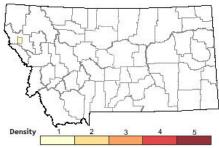
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Glossosoma penitum http://FieldGuide.mt.gov/detail\_IITRI66280.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 1

# A Caddisfly - Glossosoma traviatum http://FieldGuide.mt.gov/detail\_IITRI66290.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Glossosoma velonum http://FieldGuide.mt.gov/detail\_IITRI66310.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Glossosoma verdonum

http://FieldGuide.mt.gov/detail\_IITRI66320.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Glyphopsyche irrorata http://FieldGuide.mt.gov/detail\_IITRI64720.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - Gnathotrichus denticulatus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLZN020.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - Gnathotrichus retusus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLZN030.aspx}}$ 



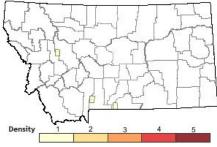
Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## Police Car Moth - Gnophaela vermiculata

http://FieldGuide.mt.gov/detail\_IILEY1A050.aspx





### Number of Observations: 3

### **General Description**

The adult Police Car Moth (*Gnophaela vermiculata*) is all black except for large white spots on wings. The wings have white patches outlined by black veins on a black background. The wingspan is about 54 mm. Although there are a number of similar-looking species in the genus, this is the only species that occurs in Montana. The large size, black and white pattern in combination with the elongate wings and diurnal activity are unique to this species in Montana. The larvae are yellow with uniformly-distributed patches of black hairs that partly obscure the yellow ground color (Coin 2004).

### Habitat .

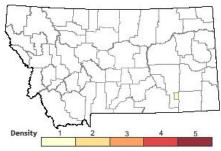
The Police Car Moth occurs in open, wooded areas of the foothills and boreal forest (Schmidt and Robinson no date).

Global Rank: G5 State Rank: SNR

## Goldenrod Gall Moth - Gnorimoschema gallaesolidagnis

http://FieldGuide.mt.gov/detail\_IILE198984.aspx





### Number of Observations: $\boldsymbol{1}$

### **General Description**

Recent genetic studies seem to show that populations of the Goldenrod Gall Moth, *Gnorimoschema gallaesolidagnis*, that feed on one species of Goldenrod (*Solidago altissima* or *Solidago gigantea*) are different from those that feed on the other. Even though there's no other way to tell them apart. This could eventually lead to the formation of two different species.

The female lays her eggs in dead leaves on, or in the leaf litter around, the goldenrods, where they stay dormant through the winter. The larva hatches in the spring, seeks out a plant, and burrows into the stem. Its presence causes the goldenrod to form a tumor-like structure called a gall, which encloses the larva and provides food for it. During the summer the larva pupates inside the gall, emerging in early fall to mate and lay eggs.

Global Rank: GNR State Rank: SNR

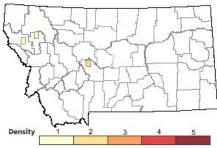
AGENCY STATUS USFWS: USFS:

BLM:

# A Caddisfly - Goeracea genota http://FieldGuide.mt.gov/detail\_IITRI66370.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 4

## Northern Rocky Mountains Refugium Caddisfly - Goereilla baumanni

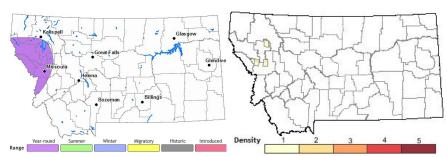
http://FieldGuide.mt.gov/detail\_IITRIF8010.aspx



### **Species of Concern**

Global Rank: G2 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 3

### **General Description**

The larvae of the caddisfly, Goereilla baumanni, occurs in high-gradient, 1st or 2nd order, perennially flowing, forested springs and streams (especially in gravel under mossy areas) of the Rocky Mountain Refugium Area (ID/MT boundary area). The small rock larval case of G. baumanni makes it somewhat distinctive compared to other caddisfly families and only another rare caddisfly, Rossiana (Rossianidae) should be confused with it while sampling in these areas.

### Habitat .

This species is associated with high elevation, forested, perennially flowing cold-spring seep areas (Wiggins 1996) and will be found in slower pooled areas than Rossiana montana (D. Stagliano, per. obs).

## Plains Clubtail - Gomphus externus

http://FieldGuide.mt.gov/detail\_IIOD008110.aspx

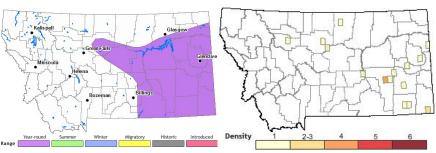


### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S4

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 20

### **General Description**

The Plains Clubtail is a fairly common, medium-sized dragonfly with a black body extensively marked with yellow including a dorsal strip of yellow on all abdominal segements—a moderate club at the end of the abdoman. Abdomen S10 mostly brown with yellow dot, while the Pronghorn Clubtail has more yellow S10-pale stripe in Male and mostly yellow in female. Sandy, gravelly or muddy streams and rivers with moderate current and grassy or wooded banks are preferred habitat (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

Sandy or muddy streams and rivers with some current and grassy or wooded banks, as well as occasionally lakes are the choice habitats for the Plains Clubtail (Dunkle 2000, Paulson 2009).

## Pronghorn Clubtail - Gomphus graslinellus

http://FieldGuide.mt.gov/detail\_IIOD008310.aspx

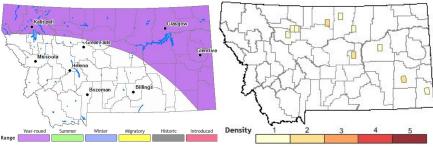


### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 13

### **General Description**

The Pronghorn Clubtail is an uncommon, less so than the plains, medium-sized dragonfly with a black body extensively marked with yellow including a dorsal strip of yellow on all abdominal segements and a moderate club at the end of the abdoman. Sandy, gravelly or muddy streams and rivers with some current and grassy or wooded banks are preferred habitat (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

### Habitat

The habitat of the Pronghorn Clubtail is usually slow-flowing streams with sandy or muddy substrates. These streams can be either rocky or not and occur in either forested or open areas. Ponds and lakes are also suitable habitats. Away from water Pronghorn Clubtails often uses nearby forests as forage habitat and will perch on trees (Dunkle 2000, Paulson 2009).

## Northern Rock Crawler - Grylloblatta campodeiformis

http://FieldGuide.mt.gov/detail\_IIORT08040.aspx



# Density 2 3 4 5

### Number of Observations: 7

### **General Description**

An Orthopteroid related to cockroaches, mantids, and walkingsticks. The body is tan to brownish, elongate, cylindrical, and wingless, about 14-35 mm (0.6-1.3 inches) long, antennae about half the body length and with 26-29 segments. Tarsi have 5 segments, cerci are long with 8-9 segments, ovipositer is long and sword-shaped (similar in shape to katydids). The head is relatively large, with the mouthparts situated anteriorly; compound eyes are small, ocelli (simple eyes) are absent.

### Habitat

Grylloblatta campodeiformes is closely associated with high-elevation areas near snow-fields or glaciers that provide cold and moist conditions throughout the year. Often they occur in or under rock fields, where crevices provide suitable micro-climates in extreme summer or winter conditions, and this probably allows them to survive in lower-elevation forested sites (Engelmann spruce, subalpine fir, western redcedar, western hemlock, Douglas-fir). Deep moss layers, large logs, and dense vegetation may also create favorable microclimates at lower elevations (Silvestri 1931, Huggard and Klenner 2003). "Rock crawlers" have been reported in Montana from rock slides and under wood at low to moderate elevation sites (as low as 991 m, 3250 ft) supporting dense stands of such tree species as Douglas-fir and ponderosa pine, as well as treeless high-elevation alpine sites, such as the summit of McDonald Peak (2993 m, 9820 ft) in the Mission Mountains and Holland Peak (2852 m, 9356 ft) in the Swan Range (Mills and Pepper 1937, Pletsch 1947, Chapman 1953). Sometimes active on the surface of snow in winter (Gurney 1948, Paul Hendricks pers. obs.).

### **Potential Species of Concern**

Global Rank: GNR State Rank: S3S4

AGENCY STATUS USFWS:

USFWS: USFS: BLM:

# A Bushtailed Caddisfly - Gumaga griseola <a href="http://FieldGuide.mt.gov/detail\_IITRI53010.aspx">http://FieldGuide.mt.gov/detail\_IITRI53010.aspx</a>



Global Rank: G5 State Rank: SNR

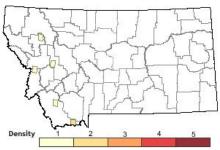
AGENCY STATUS USFWS: USFS: BLM:

# Disc Gyro - Gyraulus circumstriatus http://FieldGuide.mt.gov/detail\_IMGASM5010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 6$ 

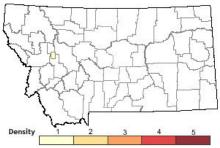
## Star Gyro - Gyraulus crista

 $\underline{\text{http://FieldGuide.mt.gov/detail}}\underline{\text{IMGASM5020.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### ${\bf Number\ of\ Observations}\colon 1$

### **General Description**

Gyraulus crista, commonly called the Star Gyro or Nautilus ramshorn, is a minute species of freshwater snail only about 3mm across, in the family Planorbidae, the ram's horn snails. These small snails have the ability to persist in intermittent ponds and lakes

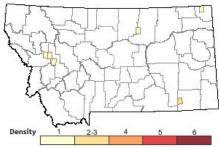
### Habitat .

# Flexed Gyro - *Gyraulus deflectus* <a href="http://FieldGuide.mt.gov/detail\_IMGASM5030.aspx">http://FieldGuide.mt.gov/detail\_IMGASM5030.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



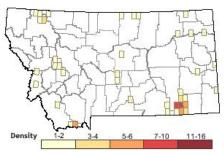
Number of Observations: 8

# Ash Gyro - *Gyraulus parvus* http://FieldGuide.mt.gov/detail\_IMGASM5050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

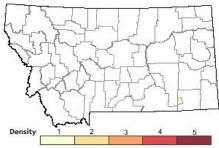


 $\textbf{Number of Observations} \colon 100$ 

# A Caddisfly - Halesochila taylori http://FieldGuide.mt.gov/detail\_IITRI64770.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 1

## Robust Lancetooth - *Haplotrema vancouverense* <a href="http://FieldGuide.mt.gov/detail\_IMGAS36120.aspx">http://FieldGuide.mt.gov/detail\_IMGAS36120.aspx</a>



Number of Observations: 11

### **Species of Concern**

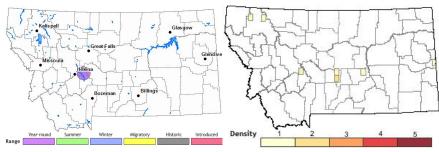
Global Rank: G5 State Rank: S1S2

# Minute Gem - Hawaiia minuscula http://FieldGuide.mt.gov/detail\_IMGAS74020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

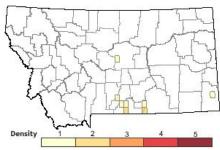


# A Long-toed Water Beetle - Helichus lithophilus http://FieldGuide.mt.gov/detail\_IICOLGX020.aspx



Global Rank: GNR State Rank: SNR

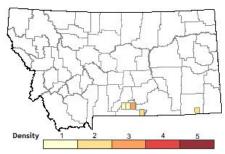
AGENCY STATUS USFWS: USFS: BLM:



# A Long-toed Water Beetle - Helichus striatus http://FieldGuide.mt.gov/detail\_IICOLGX030.aspx



Global Rank: GNR State Rank: SNR

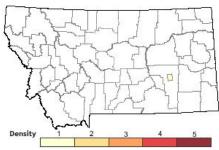


Number of Observations: 9

# A Long-toed Water Beetle - Helichus suturalis <a href="http://FieldGuide.mt.gov/detail\_IICOLGX010.aspx">http://FieldGuide.mt.gov/detail\_IICOLGX010.aspx</a>



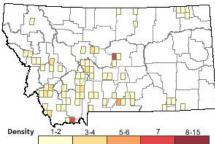
Global Rank: GNR State Rank: SNR



Number of Observations: 1

# A Caddisfly - Helicopsyche borealis http://FieldGuide.mt.gov/detail\_IITRI96020.aspx





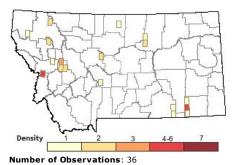
Number of Observations: 139

Global Rank: G5 State Rank: SNR

# Two-ridge Rams-horn - *Helisoma anceps* <a href="http://FieldGuide.mt.gov/detail\_IMGASM6010.aspx">http://FieldGuide.mt.gov/detail\_IMGASM6010.aspx</a>



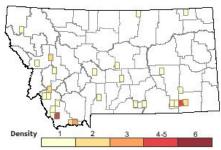
Global Rank: G5 State Rank: SNR



# A Leech - *Helobdella stagnalis* http://FieldGuide.mt.gov/detail\_IAHIR08020.aspx



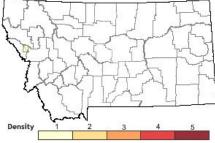
Global Rank: GNR State Rank: SNR



Number of Observations: 42

# Western Sheepmoth - *Hemileuca eglanterina* <a href="http://FieldGuide.mt.gov/detail\_IILEW0M180.aspx">http://FieldGuide.mt.gov/detail\_IILEW0M180.aspx</a>





Number of Observations: 1

Global Rank: G5 State Rank: SNR

## Pale Jumping-slug - Hemphillia camelus

http://FieldGuide.mt.gov/detail\_IMGAS59020.aspx

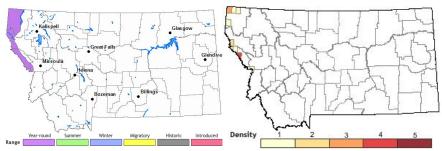


### **Species of Concern**

Global Rank: G4 State Rank: S1S2

**AGENCY STATUS** USFWS: USFS:

BLM:



### $\textbf{Number of Observations} \colon 14$

### **General Description**

A moderately large slug of about 55 mm extended, but may reach 80 mm. As with all species of Hemphillia, the shell is partly exposed through a slit on the mantle about onethird its length, the mantle elevated into a visceral hump and sometimes covered with small bumps. Dorsal base color is pale cream-colored to golden-brownish or pale gray; head coloration is pale brown or cream centrally, sometimes with an irregular single grayish lateral stripe on each side; small irregular markings on the mantle form lateral stripes. Pneumostome is posterior to the midline of the mantle on the right side. The foot is somewhat narrow, with a median groove and tail pore near the posterior end, sometimes a low keel. The sides of the foot with a uniform series of indistinct oblique grooves covered with brownish or grayish patches that highlight a cream-colored or pale brown mid-dorsal stripe. The sole is undivided (not tripartite), mucous can be milky in disturbed individuals.

### Habitat .

Mostly in mesic mixed conifer forest, typically near water such as stream-side riparian areas and seeps. Canopy species include western redcedar, western hemlock, Engelmann spruce, subalpine fir, grand fir, Douglas-fir, alder, birch, and black cottonwood. Usually found under woody debris and leaf litter or in downed rotten logs, sometimes under rocks.

### Marbled Jumping-slug - Hemphillia danielsi

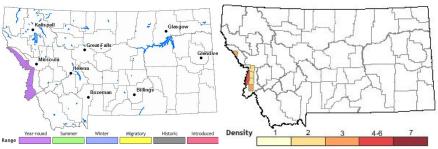
http://FieldGuide.mt.gov/detail\_IMGAS59030.aspx



#### **Species of Concern**

Global Rank: G2G3 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 25

#### **General Description**

Vanatta (1914, in Pilsbry 1948) describes *Hemphillia danielsi* as "sluglike, with the shell partly exposed, and the mantle elevated into a visceral hump, as usual in this genus. The color in formalin is yellowish-gray with bluish-black markings, but in alcohol it is white with black maculations. The shell pore is about one-third the length of the mantle. The posterior part of the foot is narrow, with a dorsal median groove and a tail pore" (p. 747). Length 3.4 cm (Vanatta 1914; Pilsbry 1948); Pilsbry considered this individual an immature. A recent specimen collected along Mill Creek measured 6.4 cm (Hendricks 2003), and Pilsbry (1948) quotes L.E. Daniels as stating that the living slug is "about two inches [5.1 cm] long, with a high hump showing the shell" (p. 748). In live animals, and some preserved specimens, the tail portion of the foot is laterally compressed, keeled, and tipped with a horn-like projection (Hendricks 2003; see also photos of *H. dromedarius* in Ovaska et al. 2002). Internal anatomy is described in Vanatta (1914) and Pilsbry (1948).

Taxanomic Comment: The original species description by Vanatta (1914, see also Pilsbry 1948) and placement in the Arionidae are still valid. This species is the eastern-most member of a small genus restricted to the Pacific Northwest.

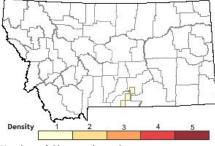
#### Habitat

There are few descriptions of the habitat occupied by this species. Frest and Johannes (1995) indicate that moderate-elevation ponderosa pine forest (*Pinus ponderosa*) is characteristic; moist valley, ravine, gorge, or talus sites are preferred (i.e., low on slopes near water). This description is supported by more recent observations (Hendricks 2003; Hendricks et al. 2006, 2007) reporting *Hemphillia danielsi* in riparian areas very near water or with streams in the vicinity. Sites included a canopy of deciduous and coniferous trees and shrubs (Engelmann spruce, Douglas-fir, western redcedar, western hemlock, black cottonwood, alder, aspen). Rock or soils at known sites have not been described, but igneous rock types dominate the range of this species.

# A Mayfly - Heptagenia elegantula http://FieldGuide.mt.gov/detail\_IIEPH38040.aspx







Number of Observations: 3

# A Mayfly - Heptagenia solitaria http://FieldGuide.mt.gov/detail\_IIEPH38120.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Assiniboine Skipper - Hesperia assiniboia <a href="http://FieldGuide.mt.gov/detail\_IILEP65190.aspx">http://FieldGuide.mt.gov/detail\_IILEP65190.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



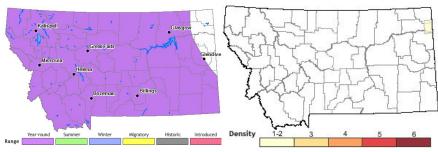
 $\textbf{Number of Observations} \colon 0$ 

# Western Branded Skipper - Hesperia colorado <a href="http://FieldGuide.mt.gov/detail\_IILEP65200.aspx">http://FieldGuide.mt.gov/detail\_IILEP65200.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

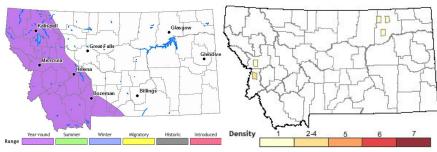


# Common Branded Skipper - Hesperia comma http://FieldGuide.mt.gov/detail\_IILEP65030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

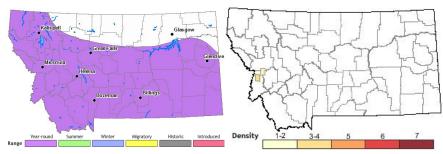


# **Juba Skipper -** *Hesperia juba*<a href="http://FieldGuide.mt.gov/detail\_IILEP65020.aspx">http://FieldGuide.mt.gov/detail\_IILEP65020.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# **Leonard's Skipper -** *Hesperia leonardus*<a href="http://FieldGuide.mt.gov/detail\_IILEP65060.aspx">http://FieldGuide.mt.gov/detail\_IILEP65060.aspx</a>



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

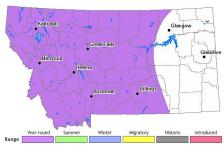
Range 🔃

# **Nevada Skipper -** *Hesperia nevada* <a href="http://FieldGuide.mt.gov/detail\_IILEP65180.aspx">http://FieldGuide.mt.gov/detail\_IILEP65180.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Ottoe Skipper - Hesperia ottoe

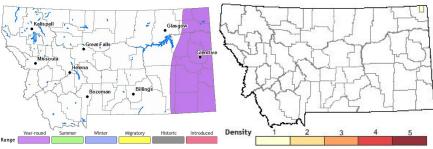
http://FieldGuide.mt.gov/detail\_IILEP65050.aspx



#### **Species of Concern**

Global Rank: G3G4 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

The ottoe skipper is a prairie-dependent species that is found on a range of prairie types from southern Manitoba and eastern eastern Montana south along the high plains to north Texas; east through Nebraska and Kansas to central Illinois and southwest Michigan. The Ottoe skipper has a wingspread that varies from 32 to 41 mm (1.25 to 1.6 in), with females slightly larger than males. Males are dull tawny to orange dorsally with indistinct brown fuscous borders and a prominent black arched stigma. Females have less fulvous overscaling with a less distinct dark border dorsally, and more well-defined spots (Scott, 1986; Shull, 1987). Ventrally, the males are clear orange-yellow, while females are ochre with vague markings (Opler and Krizek, 1984). Eggs are creamy white. Caterpillars have a dark reddish brown to black head and when newly hatched are yellowish white in color. They soon become yellowish green; later instars are gray green, then brown to purplish brown with a dark brown head and a black collar (Scott, 1986; Dana, pers. comm.).

#### Habitat

Native tall-grass prairie.

# Pahaska Skipper - *Hesperia pahaska* <a href="http://FieldGuide.mt.gov/detail\_IILEP65080.aspx">http://FieldGuide.mt.gov/detail\_IILEP65080.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

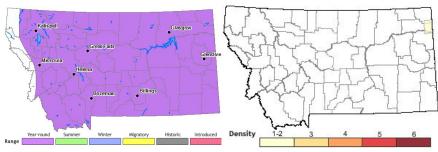


# Uncas Skipper - Hesperia uncas http://FieldGuide.mt.gov/detail\_IILEP65010.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

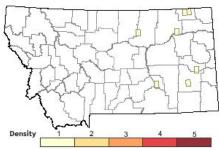


# A Water Boatman - *Hesperocorixa laevigata* <a href="http://FieldGuide.mt.gov/detail\_IIHEM45030.aspx">http://FieldGuide.mt.gov/detail\_IIHEM45030.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



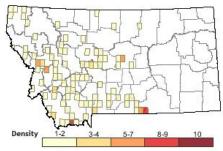
Number of Observations: 7

# Golden Stone - Hesperoperla pacifica http://FieldGuide.mt.gov/detail\_IIPLE1T020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 194

#### **General Description**

This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams.

# A Caddisfly - Hesperophylax consimilis http://FieldGuide.mt.gov/detail\_IITRI64790.aspx



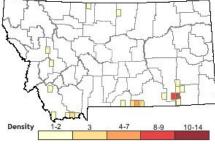
Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Hesperophylax designatus http://FieldGuide.mt.gov/detail\_IITRIE6020.aspx





Number of Observations: 54

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Hesperophylax occidentalis http://FieldGuide.mt.gov/detail\_IITRIE6040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Mohave Sootywing - Hesperopsis libya http://FieldGuide.mt.gov/detail\_IILEPQ6010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### American Rubyspot - Hetaerina americana

http://FieldGuide.mt.gov/detail\_IIODO66010.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 72

### **General Description**

A medium-sized damselfly with a distinctive red-spot at the base of otherwise clear to smoky-colored wings and a red thorax (as males) with an iridescent gold-green abdomen. American Rubyspots prefer habitats of open, clear streams and rivers with moderate to rapid flow and emergent and shoreline vegetation. Abundant populations exist on the lower Marias, Missouri and Musselshell Rivers, as well as the lower Bighorn, Tongue and Power Rivers of the Yellowstone Basin.

#### Habitat

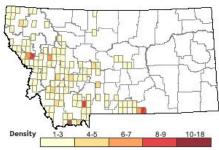
American Rubyspots prefer habitats of open, clear streams and rivers with moderate to rapid flow and emergent and shoreline vegetation. Wooded reaches with sunny patches are also selected by this species (Westfall and May 1996, Nikula et al. 2002, Paulson 2009).

# A Riffle Beetle - *Heterlimnius corpulentus* <a href="http://FieldGuide.mt.gov/detail\_IICOLGZ010.aspx">http://FieldGuide.mt.gov/detail\_IICOLGZ010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



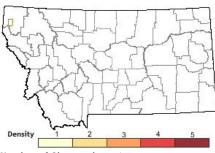
# A Freshwater Sponge - *Heteromeyenia baileyi* <a href="http://FieldGuide.mt.gov/detail\_IZSPN05060.aspx">http://FieldGuide.mt.gov/detail\_IZSPN05060.aspx</a>



### **Potential Species of Concern**

Global Rank: G5 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

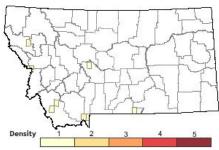
### A Heterotrissocladius Chironomid - Heterotrissocladius marcidus

http://FieldGuide.mt.gov/detail\_IIDIP0T010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### A Mayfly - Hexagenia limbata http://FieldGuide.mt.gov/detail\_IIEPH37020.aspx



Number of Observations: 31

### **General Description**

These large tusked, burrowing mayflies as larvae, prefer soft-benthic sediments of slow large river depositional areas or lake bottoms. They come off in large numbers (swarms) about mid-July from Flathead Lake, Whitefish Lake and a few other lakes in Northwest MT (R. Newell pers. comm.).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Sand-dwelling Mayfly - Homoeoneuria alleni

http://FieldGuide.mt.gov/detail\_IIEPH03040.aspx



#### **Species of Concern**

Global Rank: G4 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:





 $\textbf{Number of Observations} \colon 10$ 

### **General Description**

This burrowing (body-type & behavior) mayfly is an inhabitant of large, warmwater turbid rivers with shifting sand/gravel substrates and depositional silted habitat areas. This species is a filtering collector feeder, and has long hairs on its fore-legs to perform this filtering-function.

This species is associated with and digs its burrows within the sandy/silted depositional areas of larger, perennially flowing prairie rivers with sand-gravel dominated bottoms.

# A Caddisfly - Homophylax acutus http://FieldGuide.mt.gov/detail\_IITRIE7010.aspx



Global Rank: G3G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Homophylax flavipennis http://FieldGuide.mt.gov/detail\_IITRI64810.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

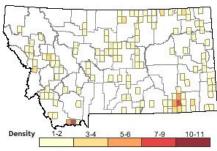
# An Amphipod - *Hyalella "azteca"* http://FieldGuide.mt.gov/detail\_ICMAL29020.aspx



#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



### Columbia Silkmoth - Hyalophora columbia

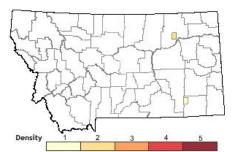
http://FieldGuide.mt.gov/detail\_IILEW0Y020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 3

#### **General Description**

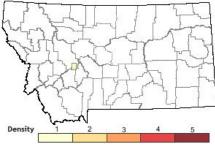
The wings of the Columbia Silkmoth (*Hyalophora Columbia*) are dark brown to red-brown. The gray area outside the white postmedian band does not contain any red. The crescent spots on the forewings and hindwings are white, although occasionally the spots on the forewing may be reduced or absent. The wing span is about 80 - 100 mm (Opler et al. 2010).

#### Habitat .

Woodland with poorly drained, boggy, acid soil; suburban gardens; and a wide variety of wooded habitats (Opler et al. 2010).

# A Noctuid Moth - *Hydraecia pallescens* <a href="http://FieldGuide.mt.gov/detail\_IILEYN0010.aspx">http://FieldGuide.mt.gov/detail\_IILEYN0010.aspx</a>





Number of Observations: 1

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Caddisfly - Hydropsyche bidens

http://FieldGuide.mt.gov/detail\_IITRI25290.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

lahitat

### A Caddisfly - Hydropsyche californica

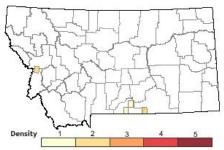
http://FieldGuide.mt.gov/detail\_IITRI63550.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 6$ 

### A Caddisfly - Hydropsyche confusa

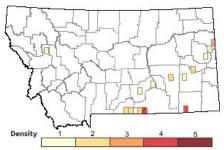
http://FieldGuide.mt.gov/detail\_IITRI63560.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 27

### A Caddisfly - Hydropsyche marqueti

http://FieldGuide.mt.gov/detail\_IITRI63510.aspx



Global Rank: GUQ State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

#### Habitat

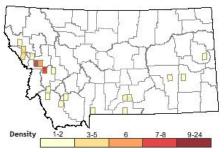
### A Caddisfly - Hydropsyche occidentalis

http://FieldGuide.mt.gov/detail\_IITRI25460.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 71

#### Habitat

### A Caddisfly - Hydropsyche placoda

http://FieldGuide.mt.gov/detail\_IITRI25300.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

### A Caddisfly - Hydropsyche simulans

http://FieldGuide.mt.gov/detail\_IITRI25180.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

Habitat

## A Caddisfly - Hydroptila ajax

http://FieldGuide.mt.gov/detail\_IITRI40380.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Caddisfly - Hydroptila arctia

http://FieldGuide.mt.gov/detail\_IITRI40930.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Caddisfly - Hydroptila argosa

http://FieldGuide.mt.gov/detail\_IITRI63720.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Caddisfly - Hydroptila consimilis

http://FieldGuide.mt.gov/detail\_IITRI40290.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

Habitat

## A Caddisfly - Hydroptila hamata

http://FieldGuide.mt.gov/detail\_IITRI40430.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Caddisfly - Hydroptila rono

http://FieldGuide.mt.gov/detail\_IITRI40020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

Habitat

## A Caddisfly - Hydroptila waubesiana

http://FieldGuide.mt.gov/detail\_IITRI40470.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Caddisfly - Hydroptila xera

http://FieldGuide.mt.gov/detail\_IITRI63790.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

## A Bark Beetle - *Hylastes gracilis* <a href="http://FieldGuide.mt.gov/detail\_IICOLZV020.aspx">http://FieldGuide.mt.gov/detail\_IICOLZV020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylastes longicollis* http://FieldGuide.mt.gov/detail\_IICOLZV030.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

## A Bark Beetle - *Hylastes macer* <a href="http://FieldGuide.mt.gov/detail\_IICOLZV040.aspx">http://FieldGuide.mt.gov/detail\_IICOLZV040.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylastes nigrinus* http://FieldGuide.mt.gov/detail\_IICOLZV050.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylastes ruber* http://FieldGuide.mt.gov/detail\_IICOLZV060.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylastinus obscurus* http://FieldGuide.mt.gov/detail\_IICO196065.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## Spurge Hawkmoth - Hyles euphorbiae

http://FieldGuide.mt.gov/detail\_IILEX18010.aspx



# Density

#### Number of Observations: 6

#### **General Description**

The forewing upperside of the Spurge Hawkmoth (*Hyles euphorbiae*) is pale yellow-gray to lavender-gray, with a dark brown spot at the center of the costa and at the wing base, and a dark brown band running from the wing tip to the inner margin. The costal and outer margins may be dusted with pink or gray. The hindwing upperside is black with a pale greenish outer margin and a pinkish brown median band which becomes white at the inner margin. The wing span is about 64 -77 mm (Opler et al. 2010).

The larvae are also conspicuously colored, with a pronounced tail or "horn" near the rear end. Young larvae are variously patterned with green, yellow, and black. Older larvae have a distinctive red, black, and yellow pattern with a double row of white spots on each side and white speckles (Balaban and Balaban 2005).

#### Habitat .

Disturbed meadows and valleys with dense stands of leafy spurge (Opler et al. 2010).

#### Exotic Species (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

## White-lined Sphinx - *Hyles lineata* <a href="http://FieldGuide.mt.gov/detail\_IILEX18030.aspx">http://FieldGuide.mt.gov/detail\_IILEX18030.aspx</a>



Number of Observations: 0

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylesinus aculeatus* http://FieldGuide.mt.gov/detail\_IICOLZX010.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylesinus californicus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZX050.aspx">http://FieldGuide.mt.gov/detail\_IICOLZX050.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylesinus criddlei* <a href="http://FieldGuide.mt.gov/detail\_IICOLZX020.aspx">http://FieldGuide.mt.gov/detail\_IICOLZX020.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylurgops porosus* <a href="http://FieldGuide.mt.gov/detail\_IICOLW7020.aspx">http://FieldGuide.mt.gov/detail\_IICOLW7020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylurgops reticulatus* http://FieldGuide.mt.gov/detail\_IICOLW7030.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylurgops rugipennis* http://FieldGuide.mt.gov/detail\_IICOLW7010.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylurgops rugipennis pinifex* <a href="http://FieldGuide.mt.gov/detail\_IICOLW7011.aspx">http://FieldGuide.mt.gov/detail\_IICOLW7011.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylurgops subcostulatus* <a href="http://FieldGuide.mt.gov/detail\_IICOLW7040.aspx">http://FieldGuide.mt.gov/detail\_IICOLW7040.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Hylurgops subcostulatus subcostulatus* <a href="http://FieldGuide.mt.gov/detail\_IICOLW7041.aspx">http://FieldGuide.mt.gov/detail\_IICOLW7041.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips borealis* http://FieldGuide.mt.gov/detail\_IICOL7C010.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips borealis borealis* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C011.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C011.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

## Six-Spined Ips - *Ips calligraphus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C110.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C110.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips emarginatus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C020.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips grandicollis* http://FieldGuide.mt.gov/detail\_IICOL7C120.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Ips integer* http://FieldGuide.mt.gov/detail\_IICOL7C030.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Ips latidens* http://FieldGuide.mt.gov/detail\_IICOL7C130.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips mexicanus* http://FieldGuide.mt.gov/detail\_IICOL7C040.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips montanus* http://FieldGuide.mt.gov/detail\_IICOL7C050.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips perterbatus* http://FieldGuide.mt.gov/detail\_IICOL7C060.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips pilifrons* http://FieldGuide.mt.gov/detail\_IICOL7C070.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips pilifrons utahensis* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C071.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C071.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Pine Engraver - *1ps pini* http://FieldGuide.mt.gov/detail\_IICOL7C160.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips plastographus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C080.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C080.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips plastographus plastographus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C081.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C081.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Ips tridens* http://FieldGuide.mt.gov/detail\_IICOL7C090.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Ips tridens engelmanni* <a href="http://FieldGuide.mt.gov/detail\_IICOL7C091.aspx">http://FieldGuide.mt.gov/detail\_IICOL7C091.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Ips woodi* http://FieldGuide.mt.gov/detail\_IICOL7C100.aspx



Global Rank: GNR State Rank: SU

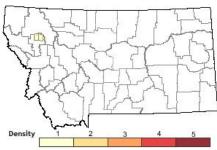
AGENCY STATUS USFWS: USFS: BLM:

## A Mayfly - *Ironodes nitidus* http://FieldGuide.mt.gov/detail\_IIEPH87060.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



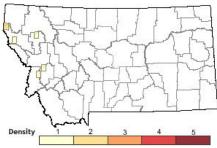
Number of Observations: 2

## A Millipede - Isaphe convexa http://FieldGuide.mt.gov/detail\_ITUNIA1010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 6

## A Millipede - Ischnocybe plicata http://FieldGuide.mt.gov/detail\_ITUNIA2010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

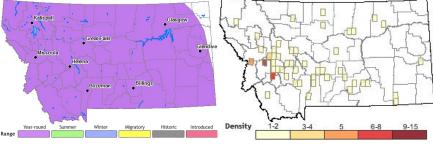
### Pacific Forktail - Ischnura cervula

http://FieldGuide.mt.gov/detail\_IIODO72080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 105

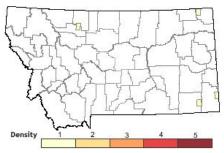
#### Habitat

The Pacific Forktail selected habitats of saline or alkaline ponds, marshes, and other wetlands, as well as a wide range of lotic habitats including slow streams with abundant emergent vegetation, specifically cattails and bulrushes (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

### Plains Forktail - Ischnura damula

http://FieldGuide.mt.gov/detail\_IIODO72090.aspx





Number of Observations: 4

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

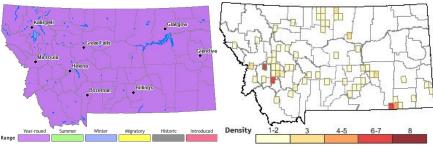
### Western Forktail - Ischnura perparva

http://FieldGuide.mt.gov/detail\_IIODO72130.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 102

#### Habitat

Although Western Forktails tend to be more common on streams than other forktails, especially slow, grassy or sedge-dominated ones, they also select the habitats of alkaline ponds with mud substrates and marshy edges of lakes. This species tends to avoid acidic conditions. Away from breeding sites, the Western Forktail can be found along forest trails basking in patches of filtered sunlight (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

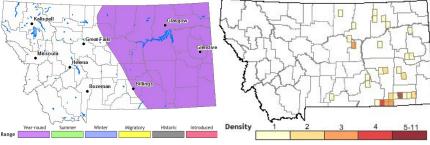
### Eastern Forktail - Ischnura verticalis

http://FieldGuide.mt.gov/detail\_IIODO72060.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 52

### Habitat

The Eastern Forktail chooses a variety of lentic habitats including ponds, lakes, and marshes, as well as slow streams and backwaters. This species avoids acidic water conditions and is not so restricted to mud-bottomed substrates, unlike other Ischnura species (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

### Hooked Snowfly - Isocapnia crinita

http://FieldGuide.mt.gov/detail\_IIPLE05030.aspx



### **Species of Concern**

Global Rank: G5 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 2

### **General Description**

Species within the Capniidae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

#### Habitat

Very little information exists about the ecology of this species (Baumann, Gaufin, and Surdick 1977). Merritt and Cummins (1996) report that members of the genus Isocapnia are found in both creeks and river, and are trophically shredder-detritivores.

### Giant Snowfly - Isocapnia grandis

http://FieldGuide.mt.gov/detail\_IIPLE05050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

### **General Description**

Species within the Capniidae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

#### Habitat

Very little information exists about the ecology of this species (Baumann, Gaufin, and Surdick 1977). Merritt and Cummins (1996) report that members of the genus Isocapnia are found in both creeks and river, and are trophically shredder-detritivores.

### Hyalite Snowfly - Isocapnia hyalita

http://FieldGuide.mt.gov/detail\_IIPLE05060.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### Number of Observations: 0

### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

Very little information exists about the ecology of this species (Baumann, Gaufin, and Surdick 1977). Reported that members of this species are found more likely in creeks, and are trophically shredder-detritivores.

### Alberta Snowfly - Isocapnia integra

http://FieldGuide.mt.gov/detail\_IIPLE05070.aspx



### **Species of Concern**

Global Rank: G4 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 7

### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults energing in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

#### Habitat

Very little information exists about the ecology of this species (Baumann, Gaufin, and Surdick 1977). Only Reported that members of this species are found in Banff Nat. Park and North Fork Flathead River which are cold water systems and are trophically shredder-detritivores.

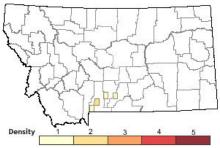
### **Vedder Snowfly - Isocapnia vedderensis**

http://FieldGuide.mt.gov/detail\_IIPLE05110.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### **Number of Observations**: 5

### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

## Blackfoot Springfly - *Isogenoides colubrinus* <a href="http://FieldGuide.mt.gov/detail\_IIPLE2Q010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE2Q010.aspx</a>



Global Rank: G5 State Rank: SNR

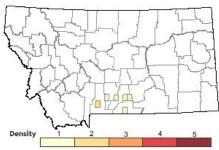
AGENCY STATUS USFWS: USFS: BLM:

## Elongate Springfly - Isogenoides elongatus <a href="http://FieldGuide.mt.gov/detail\_IIPLE2Q030.aspx">http://FieldGuide.mt.gov/detail\_IIPLE2Q030.aspx</a>



Global Rank: G5 State Rank: SNR

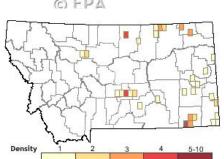
AGENCY STATUS USFWS: USFS: BLM:



## A Mayfly - Isonychia campestris http://FieldGuide.mt.gov/detail\_IIEPH16100.aspx



Figure 7 - Lateral view of *Isonychia sp.* larvae (Isonychidae)



Number of Observations: 62

Global Rank: G4 State Rank: SNR

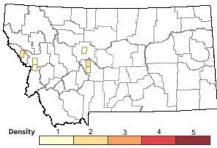
AGENCY STATUS USFWS: USFS: BLM:

## Western Stripetail - *Isoperla fulva* <a href="http://FieldGuide.mt.gov/detail\_IIPLE24210.aspx">http://FieldGuide.mt.gov/detail\_IIPLE24210.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 8

## Waterton Stripetail - Isoperla fusca http://FieldGuide.mt.gov/detail\_IIPLE24220.aspx

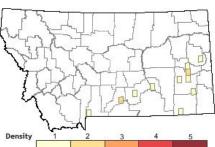


Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Plains Stripetail - *Isoperla longiseta* <a href="http://FieldGuide.mt.gov/detail\_IIPLE24300.aspx">http://FieldGuide.mt.gov/detail\_IIPLE24300.aspx</a>





Number of Observations: 13

Global Rank: G5 State Rank: SNR

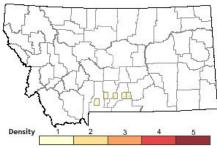
AGENCY STATUS USFWS: USFS: BLM:

## Mormon Stripetail - *Isoperla mormona* http://FieldGuide.mt.gov/detail\_IIPLE24380.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Springs Stripetail - Isoperla petersoni

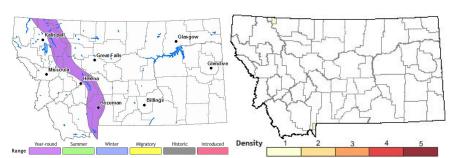
http://FieldGuide.mt.gov/detail\_IIPLE24420.aspx



### **Species of Concern**

Global Rank: G5 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 2$

### **General Description**

This rare, nicely patterned, cold-water Isoperlid Stonefly is limited in distribution in Montana, but is found elsewhere in the Northern and Southern Rocky Mountains including Alberta, British Columbia, Wyoming, Idaho, and Utah.

#### Hahitat

This species occurs in small springs and spring-fed creeks (Baumann et al. 1977). Nymphs were found in large woody debris and mossy cobbles. Merritt and Cummins (1996) describe Isoperla trophic relationships as predators (especially chironomids, and blackflies).

### Checkered Stripetail - Isoperla pinta

http://FieldGuide.mt.gov/detail\_IIPLE24450.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

This fairly rare, Isoperlid Stonefly is limited in distribution to 3 counties in Montana and limited in the Northern and Sounthern Rocky Mountains--Wyoming, Idaho, Colorado and Utah., but is common elsewhere in the Casacade and Coastal Ranges

#### Habita

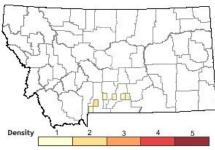
This species occurs and is common in creeks and rivers (Baumann et al. 1977). Nymphs were found in large woody debris and mossy cobbles. Merritt and Cummins (1996) describe Yoraperla trophic relationships as shredders (large organic detritus, plant materials).

## Fivespot Stripetail - *Isoperla quinquepunctata* <a href="http://FieldGuide.mt.gov/detail\_IIPLE24460.aspx">http://FieldGuide.mt.gov/detail\_IIPLE24460.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 7

## Colorado Stripetail - *Isoperla sobria* <a href="http://FieldGuide.mt.gov/detail\_IIPLE24540.aspx">http://FieldGuide.mt.gov/detail\_IIPLE24540.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Notched Stripetail - *Isoperla sordida* <a href="http://FieldGuide.mt.gov/detail\_IIPLE24550.aspx">http://FieldGuide.mt.gov/detail\_IIPLE24550.aspx</a>



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

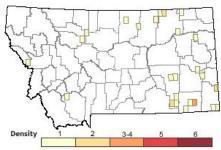
## A Caddisfly - Ithytrichia clavata

http://FieldGuide.mt.gov/detail\_IITRI84010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations : 32

#### Habitat

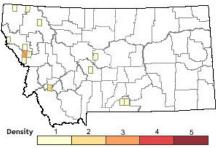
Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.

## **Longhead Sallfly - Kathroperla perdita** http://FieldGuide.mt.gov/detail\_IIPLE1B010.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 16$ 

### **General Description**

Nymphs and adults within the Chloroperliidae are small green and yellow stoneflies. Known to fly-fisherman as "little yellows", "little greens" and "Yellow Sallies". This family is well represented in Montana with 26 species, one of the larger families in the order Plecoptera, containing some 100 species distributed throughout the Holarctic region of North America. The adults are emerging in late spring and throughout summer.

## A Millipede - Kepolydesmus anderisus http://FieldGuide.mt.gov/detail\_ITUNI88010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

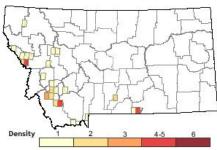
 $\textbf{Number of Observations} \colon 0$ 

## Sickle Springfly - Kogotus modestus http://FieldGuide.mt.gov/detail\_IIPLE2F010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Smooth Springfly - Kogotus nonus <a href="http://FieldGuide.mt.gov/detail\_IIPLE2F020.aspx">http://FieldGuide.mt.gov/detail\_IIPLE2F020.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Pygmy Slug - Kootenaia burkei http://FieldGuide.mt.gov/detail\_IMGAS0B010.aspx



 $\textbf{Number of Observations} \colon 25$ 

### **Species of Concern**

Global Rank: G2 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:

# A Sand-dwelling Mayfly - Lachlania saskatchewanensis

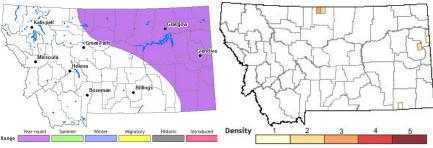
http://FieldGuide.mt.gov/detail\_IIEPH66030.aspx



### **Species of Concern**

Global Rank: G4 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 10$ 

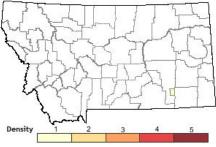
#### Habitat

This species is associated with large, perennially flowing prairie rivers (Large Prairie River AES) with sand-gravel dominated bottoms with cobble riffles

# A Noctuid Moth - Lacinipolia stricta

http://FieldGuide.mt.gov/detail\_IILEYJB310.aspx





## Number of Observations: 1

The Lacinipolia stricta forewing is dark brown in the median area, and paler yellowish-brown in the basal and subterminal areas. The terminal area is dark brown mixed with black. The reniform spot is pale brown, angular, with a conspicuous thick white outline. The hindwing is dirty brownish-gray with a pale yellowish terminal line and fringe (Powell and Opler, 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Chalk-fronted Corporal - Ladona julia

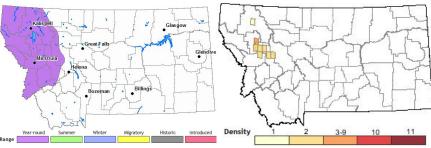
http://FieldGuide.mt.gov/detail\_IIODO45230.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S4

AGENCY STATUS USFWS: USFS: BLM:



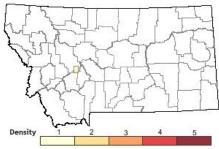
Number of Observations: 22

Chalk-fronted Corporals prefer habitats of open and wooded lakes, ponds, marshes, swamps and bogs with acid water, as well as slow streams. Away from water this species tends to forage and bask in sunny patches of nearby woodlands and forest (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

# Hemlock Looper Moth - Lambdina fiscellaria

http://FieldGuide.mt.gov/detail\_IILEU3U010.aspx





### $\textbf{Number of Observations} \colon 1$

### General Description

The adult Hemlock Looper Moth (*Lambdina fiscellaria*) is a thinly scaled mid-sized geometrid. Its antennae has very long pectinations resulting in a conspicuously feathery antennae. The ground color varies from tan to brown with dark AM and PM lines. The PM lines ar bordered distally with orange-brown. The discal spots are obscure (Anweiler 2004 and Schmidt 2003).

The larvae has a brownish and grayish body with spotted head and with many longitudinal lines and stripes. Its gray head has small brown and large black spots. It has a gray prothoracic shield with yellowish patches and dark spots, and grayish brown thoracic legs. The larvae has a mostly brownish gray dorsum with an indistinct, gray middorsal stripe trimmed in lighter gray, and four black dorsal spots on each segment. There is a grayish white subdorsal stripe tinted with dark yellow near hind margin of the segments. There are many grayish, brownish, or blackish longitudinal lines and stripes below subdorsal stripe. There is a large grayish spot above black spiracles on some segments, and a grayish white venter with several dark longitudinal lines. The larvae is a "looper" and has no prolegs except on segments 6 and 10. The length of the larvae is 25 to 30 mm (Maier 2004).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

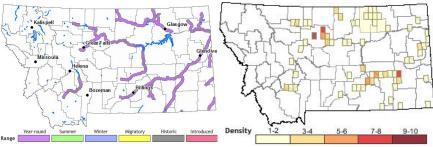
# Fatmucket - Lampsilis siliquoidea

http://FieldGuide.mt.gov/detail\_IMBIV21280.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 171

### **General Description**

The Fatmucket is Montana's most widespread and abundant mussel and is believed to most widely distributed mussel in North America--it's native range occurs in areas of the central United States from Montana, the Dakotas, and Nebraska east to New York, and as far south as Louisiana and Mississippi. In Canada it may occupy areas from the Northern Territories and Alberta to Quebec.

### Habitat .

The species can be found under a number of conditions but prefers sandy-muddy bottoms and quiet water. Not suited to strong currents or rough bottoms, although it is occasionally found in riffles, most likely from being washed out of calmer pools. It is abundant in quiet water below riffles, with a muddy bottom, and in slowly running water with sand, fine gravel, and mud (La Rocque 1967:226). Clarke (1981:344) indicates the species is abundant and occurs in lakes and rivers of all sizes; it is found on sand, mud, clay and gravel substrates. It is often found in river banks in water as shallow as 5 to 8 cm.

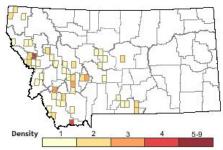
# A Riffle Beetle - Lara avara

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLHD010.aspx}}$ 



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# White Heelsplitter - Lasmigona complanata

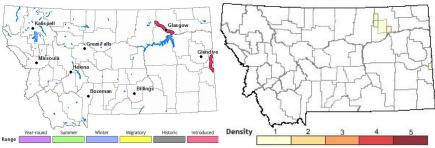
http://FieldGuide.mt.gov/detail\_IMBIV22012.aspx



# Exotic Species (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 5

### **General Description**

The White Heelsplitter is a relatively common mussel in North America, and has been recently introduced into MT. It can be found as far south as the Tennessee River, throughout the Midwest and Plains States (native in SD, ND) and into southern Canada. The White Heelsplitter prefers pools or sluggish streams with a mud, sand, or fine gravel bottom. Known host fish species include the Common Carp, Green Sunfish, Largemouth Bass, White Crappie, Orangespotted Sunfish and Banded Killfish, all these are introduced or exotic species in Montana.

### Habitat .

This mussel has been found to occupy very shallow waters and habitats as deep as 20 feet. The White Heelsplitter prefers pools or sluggish streams with a mud, sand, or fine gravel bottom. Occurs in fine mud in deep pools (Gustafson 1996).

# Meltwater Lednian Stonefly - Lednia tumana

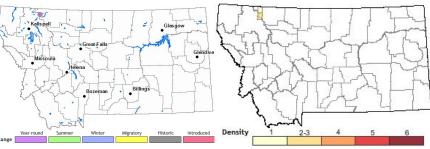
http://FieldGuide.mt.gov/detail\_IIPLE0K010.aspx



### **Species of Concern**

Global Rank: G1G2 State Rank: S1

AGENCY STATUS USFWS: C USFS: BLM:



### Number of Observations: 4

### **General Description**

The Meltwater Lednian Stonefly is a small, dark species of extremely cold glacier-fed streams at high elevations in Glacier Park. Little else is known about its habits or ecology, accept that the adults have hatched by mid-summer (July-August) and are presumably mating during this time.

# Habitat .

The larvae are found in small alpine, mountain streams (Newell and Minshall 1978), but only those closely linked to glacial run-off (Giersch 2002).

# A Caddisfly - Lenarchus brevipennis

http://FieldGuide.mt.gov/detail\_IITRI64850.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lenarchus rillus

http://FieldGuide.mt.gov/detail\_IITRI64910.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma apornum

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI01150.aspx}}$ 



Global Rank: G2G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

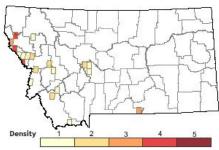
 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Lepidostoma cascadense http://FieldGuide.mt.gov/detail\_IITRI64090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Lepidostoma cinereum <a href="http://FieldGuide.mt.gov/detail\_IITRI01130.aspx">http://FieldGuide.mt.gov/detail\_IITRI01130.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma knulli

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI01280.aspx}}$ 



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

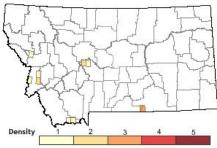
 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Lepidostoma pluviale <a href="http://FieldGuide.mt.gov/detail\_IITRI64170.aspx">http://FieldGuide.mt.gov/detail\_IITRI64170.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 13

# A Caddisfly - Lepidostoma podagrum <a href="http://FieldGuide.mt.gov/detail\_IITRI64180.aspx">http://FieldGuide.mt.gov/detail\_IITRI64180.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma quercinum http://FieldGuide.mt.gov/detail\_IITRI64210.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma rayneri

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI01010.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma roafi

http://FieldGuide.mt.gov/detail\_IITRI64220.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma spicatum

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI01400.aspx}}$ 



Global Rank: G3G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Lepidostoma stigma

http://FieldGuide.mt.gov/detail\_IITRI64250.aspx



Global Rank: G5 State Rank: SNR

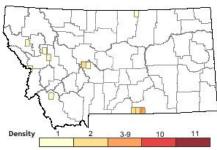
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Lepidostoma unicolor http://FieldGuide.mt.gov/detail\_IITRI64270.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Bilobed Tadpole Shrimp - Lepidurus bilobatus

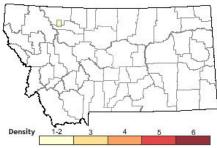
http://FieldGuide.mt.gov/detail\_ICBRA10030.aspx



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 2

### **General Description**

This species of tadpole shrimp (order Notostraca) is a member of the crustacean class Branchiopoda. Their large, hardened carapace (shell) makes them look like a fat tadpole swimming through the water or crawling along the bottom. They are important components of many freshwater and saline intermittent or temporary wetlands (Dodson and Frey 2001, Brendonk et al. 2008). These animals are especially common in seasonal wetlands, where populations are maintained by banks of resting eggs that may remain dormant and can survive drying periods of decades or longer (Brendonck 1996).

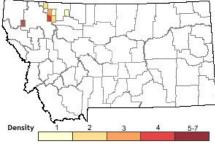
# Round Spine Tadpole Shrimp - Lepidurus couesii

http://FieldGuide.mt.gov/detail\_ICBRA10040.aspx



Global Rank: G4 State Rank: SNR AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 20

### **General Description**

The Round Spine Tadpole Shrimp (Lepidurus couesii) is typically associated with plains, intermountain valley, and high desert environments, but it seems to occupy a wide range of habitats in Montana. It has been found in water bodies ranging from temporary marshes that do not fill every year to seemingly-permanent beaver ponds and in wetted habitats within aspen forests and ponderosa pine forest (Hossack,B.H., R.L. Newell and D.C. Rogers 2011).

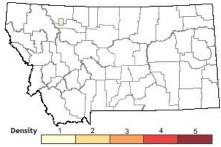
## Habitat

It has been found in water bodies ranging from temporary marshes that do not fill every year to seemingly-permanent beaver ponds and in wetted habitats including aspen forests and ponderosa pine forest (Hossack,B.H., R.L. Newell and D.C. Rogers 2011).

# Lemon Tadpole Shrimp - Lepidurus lemmoni

http://FieldGuide.mt.gov/detail\_ICBRA10050.aspx





### $\textbf{Number of Observations} \colon 1$

### **General Description**

This species of tadpole shrimp (order Notostraca) is a member of the crustacean class Branchiopoda. Their large, hardened carapace (shell) makes them look like a fat tadpole swimming through the water or crawling along the bottom. They are important components of many freshwater and saline intermittent or temporary wetlands (Dodson and Frey 2001, Brendonk et al. 2008). These animals are especially common in seasonal wetlands, where populations are maintained by banks of resting eggs that may remain dormant and can survive drying periods of decades or longer (Brendonck 1996).

Global Rank: G4 State Rank: SNR

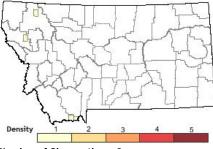
AGENCY STATUS USFWS: USFS:

BLM:

# A Mayfly - Leptophlebia cupida http://FieldGuide.mt.gov/detail\_IIEPH27050.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 3

### Habitat

I was at Rainbow Lake, Sanders County, about 10 miles NE of Plains. This rocky substratum lake had dozens of nymphs of Leptophlebia cupida under every rock. I have never seen such numbers of this species.

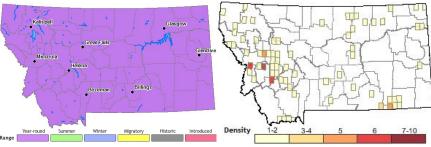
# Spotted Spreadwing - Lestes congener

http://FieldGuide.mt.gov/detail\_IIODO67040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 127

### **General Description**

The Spotted Spreadwing is a rather dull brown spreadwing damselfly. Dark spots on the sides of the thorax distinctive. Spotteds apprear to be the only spreadwings with males having lower surface of eyes brown. Pruniosity on the tip of the abdomen not quite as conspicuous as only co-occuring spreadwings--the Northern, Emerald or Lyre-tipped.

### Habitat .

The habitat of the Spotted Spreadwing includes marsh-emergent vegetation bordered lakes and ponds, small ponds, pools, swamps and sluggish backwaters and slow streams as well as saline lakes. It is common for the breeding ponds to dry up sometime during the summer months (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

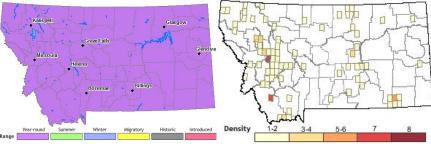
# Northern Spreadwing - Lestes disjunctus

http://FieldGuide.mt.gov/detail\_IIODO67051.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 141$ 

### **General Description**

This is a relatively large damselfly 1 ¼ to 1 ¾ inches (30 to 41 mm) long. The build is slender with short wings in proportion to the length of the abdomen. The thorax is bronze-black with a yellow stripe down the center on the upper surface.

#### Habitat

Northern Spreadwings prefer still-water and well-vegetated habitats of lakes and ponds, some of which can be temporary, as well as marshes, swamps, pools and bogs, and even slow, sluggish streams. (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

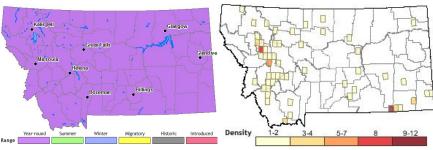
# **Emerald Spreadwing - Lestes dryas**

http://FieldGuide.mt.gov/detail\_IIODO67020.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations : 111

Emerald Spreadwings tend to select temporary or permanent and usually wooded ponds and fens, often acidic, as well as backwaters of streams as habitats. They can also be commonly found in nearby forests and shrublands away from breeding sites (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

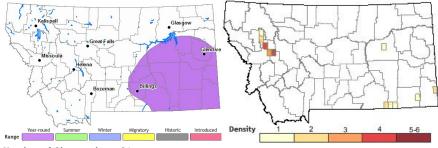
# **Sweetflag Spreadwing - Lestes forcipatus**

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIODO67030.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 24

### Habitat

The habitat of the Sweetflag Spreadwing is temporary and permanent ponds, lakes with emergent vegetation, as well as bogs, fens and slow "weedy" streams (Westfall and May 1996, Paulson 2009).

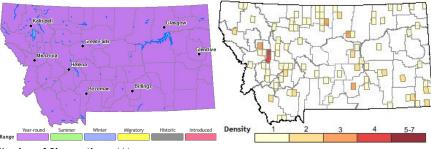
# Lyre-tipped Spreadwing - Lestes unguiculatus

http://FieldGuide.mt.gov/detail\_IIODO67080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 111

#### Habitat

The habitat of Lyre-tipped Spreadwings includes temporary ponds, shallow marshes, marshy ponds and lakes, sloughs and slow streams, as well as artificial wetlands and prairie potholes. Although this species often selects wetlands that dry up during summers months, they are also very adept at colonizing new and artificial wetlands (Westfall and May 1996, Acorn 2004, Paulson 2009).

# Eyed Brown - Lethe eurydice

http://FieldGuide.mt.gov/detail\_IILEPN0010.aspx



### **Potential Species of Concern**

Global Rank: G4 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 2

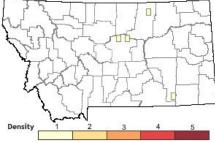
### **General Description**

The Eyed-Brown is a small brown species with upperside wing light to medium brown with black eyespots. Underside of forewing has submarginal eyespots about the same size, usually touching or linked like a chain; dark line inside the hindwing's spot row is zigzagged. They are found in the Northeastern corner of Montana in prairie pothole areas.

 $Open \ sedge \ meadows, freshwater \ marshes, slow-moving \ streams, cord \ grass \ swales \ in \ tallgrass \ prairie.$ 

# A Giant Water Bug - Lethocerus americanus <a href="http://FieldGuide.mt.gov/detail\_IIHEMB2020.aspx">http://FieldGuide.mt.gov/detail\_IIHEMB2020.aspx</a>





Number of Observations: 4

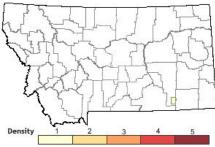
Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Phragmites Wainscot - Leucania phragmitidicola

http://FieldGuide.mt.gov/detail\_IILEYJH060.aspx





### Number of Observations: 1

### **General Description**

The Leucania phragmitidicola wingspan is about 32 mm. The forewing is light tan but not uniformly-colored. There is an indistinct and diffuse pale band that runs obliquely from the apex to the inner margin. The pale band is surrounded on both sides by slightly darker shading. The antemedian line is composed of several dark but inconspicuous dots. The main vein runs from the base to middle of wing. The main vein is whitish, bordered by a thick dark line on inner edge, and has slightly darker shading along the outer margin. The hindwing is white with no dark border (Powell and Opler, 2009).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Boreal Whiteface - Leucorrhinia borealis

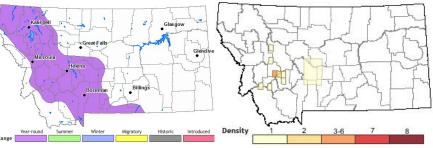
http://FieldGuide.mt.gov/detail\_IIODO44010.aspx



### **Species of Concern**

Global Rank: G5 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 15$ 

#### Habitat

The habitat of Boreal Whitefaces includes sedge marshes, mossy fens and bogs, and vegetated ponds and lakes. They are presumably on prairie lakes and ponds as well (Dunkle 2000, Paulson 2009).

## Crimson-ringed Whiteface - Leucorrhinia glacialis

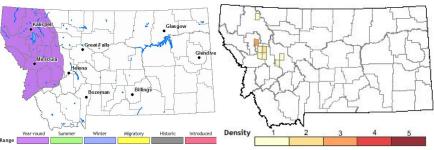
 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIODO44030.aspx}}$ 



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S3

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 11$ 

Crimson-winged Whitefaces prefer sparsely- to well-vegetated, boggy lake, pond, and marsh habitats in forested areas (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

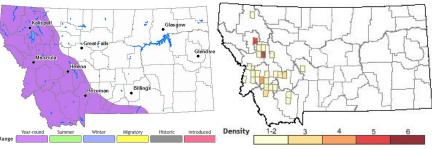
## Hudsonian Whiteface - Leucorrhinia hudsonica

http://FieldGuide.mt.gov/detail\_IIODO44040.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 49

#### Habitat .

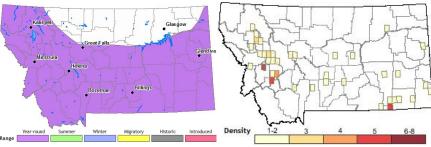
The habitat of the Hudsonian Whiteface consists of boggy or marshy ponds, sedge meadows, lakes with sand bottoms, and bogs and fens. Away from breeding sites females tend to be found in wooded clearings where they bask on sunny logs or on the ground (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

## Dot-tailed Whiteface - Leucorrhinia intacta

http://FieldGuide.mt.gov/detail\_IIODO44050.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 73$ 

#### Habitat

The habitat of the Dot-tailed Whiteface is a wide variety of lakes and ponds, bogs, sloughs, and marshes, as well as slow streams, all with abundant emergent vegetation. This species is often encountered basking in sunlit clearing some distance away from breeding sites, especially immatures (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

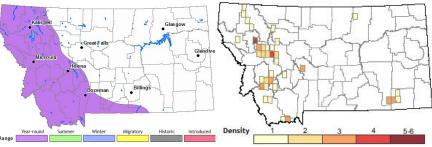
## Belted Whiteface - Leucorrhinia proxima

http://FieldGuide.mt.gov/detail\_IIODO44070.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 63

#### Habitat

The Belted Whiteface prefers marshy or boggy ponds, fens and lakeshores with abundant vegetation as breeding habitat. This species also occurs away from breeding sites when they forage in small forest openings (Dunkle 2000, Paulson 2009).

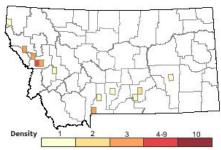
## A Micro Caddisfly - Leucotrichia pictipes http://FieldGuide.mt.gov/detail\_IITRI47010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 29

Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.

# A Mayfly - Leucrocuta maculipennis http://FieldGuide.mt.gov/detail\_IIEPH71040.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

# A Mayfly - Leucrocuta petersi http://FieldGuide.mt.gov/detail\_IIEPH71080.aspx



Number of Observations: 0

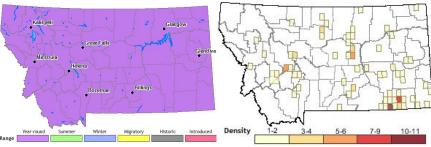
Global Rank: G2G3 State Rank: SNR

## **Eight-spotted Skimmer - Libellula forensis**

http://FieldGuide.mt.gov/detail\_IIODO45080.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 141$ 

#### Habitat

The habitat of the Eight-spotted Skimmer is a variety of lakes and ponds, as well as bogs, spring runs, sloughs, slow streams and backwaters, and alkaline wetlands. This species is also encountered away from water using uplands and clearings (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

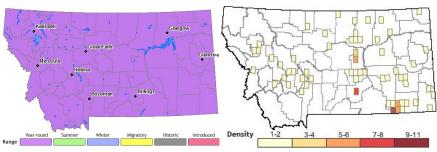
## Twelve-spotted Skimmer - Libellula pulchella

http://FieldGuide.mt.gov/detail\_IIODO45130.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 119

#### **General Description**

The 12 spotted skimmer is a large showy dragonfly in the skimmer family; it looks even larger when flittering around the wetland because of the numerous spots placed along the length of the wing (6 spots on each side with black at the tip, a white spot nearest the tip is the Eight-spotted Skimmer). In mid-summer (July & August), they are very active and territorial often covering the whole wetland or lake shore on patrol and then returning back to the same area. This species is found statewide in ponds, lakes and wetlands with abundant emergent vegetation and oftentimes some open water. Like all adult dragonflies they eat smaller flying insects such as mosquitoes and flies, but will also take down damselflies and moths.

#### Habitat

Twelve-spotted Skimmers prefer habitats of lakes and ponds, often shallow or semipermanent, as well as slow streams, marshes, and bogs. They are also commonly encountered in open fields where they forage (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

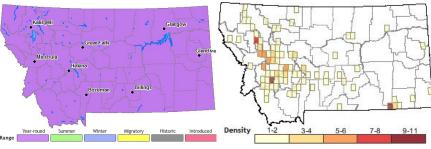
## Four-spotted Skimmer - Libellula quadrimaculata

http://FieldGuide.mt.gov/detail\_IIODO45140.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 187

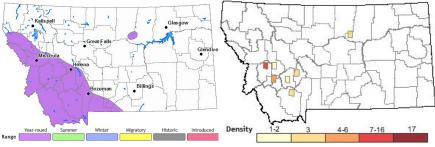
#### Hahita

The preferred habitat of Four-spotted Skimmers is lakes and ponds with emergent vegetation and mud bottoms, fens, bogs, slow streams, and boggy and marshy wetlands. This species tends to select acidic wetland types but they can tolerate saline conditions as well. Four-spotted Skimmers can be seen flying in open areas often a great distance from water (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

## Flame Skimmer - Libellula saturata

http://FieldGuide.mt.gov/detail\_IIODO45150.aspx





 $\textbf{Number of Observations} \colon 35$ 

#### Habitat

Flame Skimmers select a broad range of habitat choices including lakes, ponds, ditches, pools, slow streams and stream pools, as well as hot springs in the north and high altitudes (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

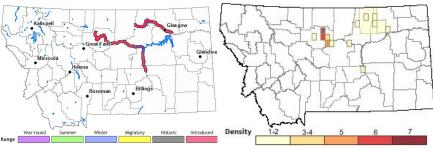
#### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S4

## Black Sandshell - Ligumia recta

http://FieldGuide.mt.gov/detail\_IMBIV26020.aspx





#### Number of Observations: 42

#### **General Description**

The Black Sandshell is the largest mussel found in the Missouri and Milk river systems. It has a very heavy, large long-elliptical black shell (up to 10 inches) with a pinkish to purple nacre. It is likely an introduced species to Montana because it was not found or reported before the 1970's and now appears to be relatively abundant and increasing it's range up the Missouri River, but not in the Yellowstone River.

#### Habitat

The species usually occurs in large rivers but is also found in large lakes and canals. It is generally found on sand and gravel bottoms, but occasionally on mud (Clarke 1981:334). In Montana, this species was found in areas with higher percentage of cobble/pebble than co-occuring fatmuckets in the Missouri, Milk and Marias River systems and never in silted areas (Stagliano 2009, pers. obs.)

#### Exotic Species (not native to Montana)

Global Rank: G4G5 State Rank: SNA

# Giant Gardenslug - Limax maximus http://FieldGuide.mt.gov/detail\_IMGAS88030.aspx



# Density

Number of Observations: 17

#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

## Viceroy - Limenitis archippus

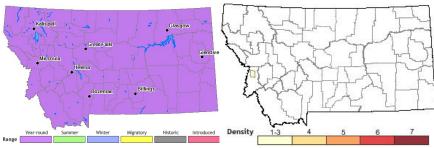
http://FieldGuide.mt.gov/detail\_IILEPL3020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS:

BLM:



#### Number of Observations: 3

#### **General Description**

The Viceroy is orange and black, resembling the Monarch (Danaus plexippus), except the Viceroy has a black line across the hindwing and a single row of white dots in the black marginal band. Where Monarchs are rare in Florida, Georgia, and the Southwest, Viceroys are brown instead of orange and mimic the Queen Butterfly (Danaus gilippus).

#### Habitat

Moist open or shrubby areas such as lake and swamp edges, willow thickets, valley bottoms, wet meadows, and roadsides.

## Red-spotted Admiral - Limenitis arthemis

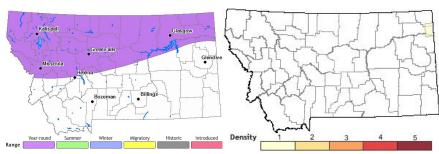
 $\underline{\text{http://FieldGuide.mt.gov/detail\_IILEPL3010.aspx}}$ 



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

WHITE ADMIRAL is a medium sized brush-footed butterfly( 2 1/4 - 4 inches) with the upperside wing black with broad white median bands on both wings; hindwing has a marginal row of blue dashes and a submarginal row of red dots. Underside is reddish-brown with white median bands as on the upperside.

## Habitat \_ Riparian forests

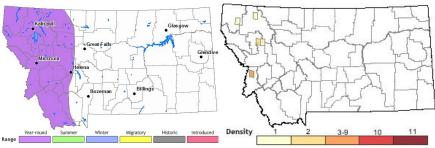
## Lorquin's Admiral - Limenitis Iorquini

http://FieldGuide.mt.gov/detail\_IILEPL3040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 14

#### **General Description**

The upperside of the Lorquin's Admiral (*Limenitis lorquini*) is black with white median bands on both wings. The tip of the forewing is orange-brown. The underside is reddishbrown with white markings. The wing span is about 51 - 67 mm (Opler et al. 2010).

#### Habitat .

Forest edges, mountain canyons, orchards, parks, streamsides, fencerows and groves of cottonwood and poplar (Opler et al. 2010).

## Weidemeyer's Admiral - Limenitis weidemeyerii

http://FieldGuide.mt.gov/detail\_IILEPL3030.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 3

#### **General Description**

The upperside of the Weidemeyer's Admiral (*Limenitis weidemeyerii*) is black with a white median band on both wings. The submarginal areas of the hindwing are black. The underside is brown with white markings repeated. The base of hindwing is gray-white with dark crosslines. The marginal spots on hindwing are gray-white. The wing span is about 57 - 95 mm (Opler et al. 2010).

#### Habitat

Deciduous forest, streamsides in coniferous forests, aspen groves, small towns, suburbs (Opler et al. 2010).

# A Caddisfly - Limnephilus alberta http://FieldGuide.mt.gov/detail\_IITRI15170.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Limnephilus bifidus http://FieldGuide.mt.gov/detail\_IITRI15240.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus canadensis http://FieldGuide.mt.gov/detail\_IITRI64940.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus cockerelli http://FieldGuide.mt.gov/detail\_IITRI64950.aspx



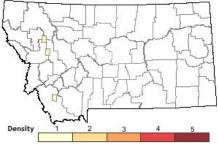
Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Limnephilus externus http://FieldGuide.mt.gov/detail\_IITRI64980.aspx





Number of Observations: 3

Global Rank: G5 State Rank: SNR

# A Caddisfly - Limnephilus fagus http://FieldGuide.mt.gov/detail\_IITRI65010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus frijole http://FieldGuide.mt.gov/detail\_IITRI65040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus harrimani http://FieldGuide.mt.gov/detail\_IITRI65060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus hyalinus http://FieldGuide.mt.gov/detail\_IITRI15040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus indivisus http://FieldGuide.mt.gov/detail\_IITRI15050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus moestus http://FieldGuide.mt.gov/detail\_IITRI15060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus ornatus http://FieldGuide.mt.gov/detail\_IITRI15070.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus picturatus http://FieldGuide.mt.gov/detail\_IITRI65220.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus productus <a href="http://FieldGuide.mt.gov/detail\_IITRI65230.aspx">http://FieldGuide.mt.gov/detail\_IITRI65230.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus secludens http://FieldGuide.mt.gov/detail\_IITRI65250.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus spinatus http://FieldGuide.mt.gov/detail\_IITRI65270.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Limnephilus taloga http://FieldGuide.mt.gov/detail\_IITRI65310.aspx



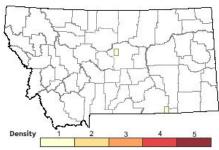
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Limnodrilus Worm - Limnodrilus hoffmeisteri http://FieldGuide.mt.gov/detail\_IAPOL10010.aspx



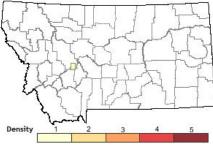
Global Rank: GNR State Rank: S5



Number of Observations: 2

# A Noctuid Moth - Lithophane pertorrida http://FieldGuide.mt.gov/detail\_IILEYFE280.aspx





Number of Observations: 1

Global Rank: GNR State Rank: SNR

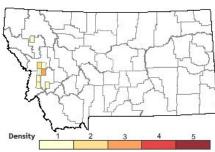
# A Millipede - Lophomus laxus http://FieldGuide.mt.gov/detail\_ITUNI90010.aspx



#### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 10

### **Lustrous Copper - Lycaena cupreus**

http://FieldGuide.mt.gov/detail\_IILEPC1020.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 3

#### **General Description**

The Lustrous Copper (*Lycaena cupreus*) upperside is shiny coppery red with small black spots and black border. The spots are larger in the female. The underside is gray with many small black spots. The forewing has an overall copper tinge with a black submarginal line. The hindwing's submarginal line is red. The wing span is about 29 - 31 mm (Opler et al. 2010).

#### Habitat .

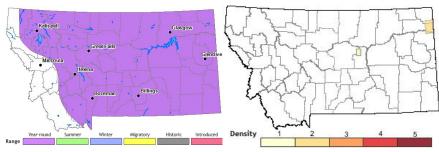
Mountain meadows, sagebrush flats, glacial cirques, rocky treeless areas (Opler et al. 2010).

# Gray Copper - Lycaena dione http://FieldGuide.mt.gov/detail\_IILEPC1170.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

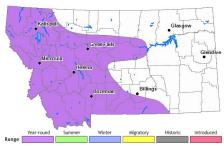


# Edith's Copper - Lycaena editha http://FieldGuide.mt.gov/detail\_IILEPC1050.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



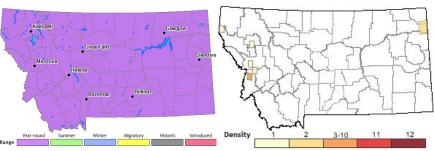
### Purplish Copper - Lycaena helloides

http://FieldGuide.mt.gov/detail\_IILEPC1130.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 17

#### **General Description**

The upperside of the male Purplish Copper (*Lycaena helloides*) is brown with purple iridescence. The female is more orange. The hindwing of both sexes has a broad orange band at the margin (Opler et al. 2010).

The mature larva is apple green with a yellow lateral line and light brown head. The pupa is initially green, turning brown as it ages (Guppy and Shepard 2001).

#### Habitat .

Disturbed areas including roadsides and open fields, wet meadows, marshes, streamsides, and valleys (Opler et al. 2010).

# Blue Copper - Lycaena heteronea http://FieldGuide.mt.gov/detail\_IILEPC1100.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



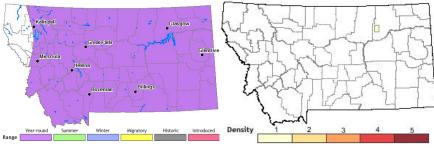
### **Bronze Copper - Lycaena hyllus**

http://FieldGuide.mt.gov/detail\_IILEPC1070.aspx



Global Rank: G4G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

The Bronze Copper is a small (1 1/4 - 1 7/8 inches) Gossamer-wing Butterflies (Lycaenidae). The wing upperside of male iridescent copper-brown; female forewing yellow-orange with black spots. Underside forewing of both sexes orange with black spots; underside hindwing is gray-white with black spots and a broad orange outer margin.

#### Habitat .

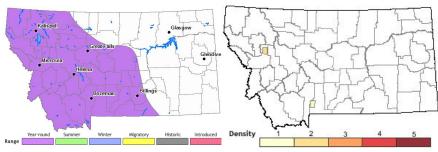
Low, wet areas such as bogs, marshes, wet meadows, ponds.

# Mariposa Copper - *Lycaena mariposa* http://FieldGuide.mt.gov/detail\_IILEPC1150.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# **Lilac-bordered Copper -** *Lycaena nivalis*<a href="http://FieldGuide.mt.gov/detail\_IILEPC1140.aspx">http://FieldGuide.mt.gov/detail\_IILEPC1140.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

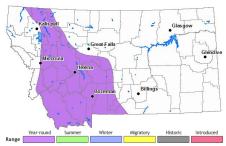


# Little Copper - Lycaena phlaeas http://FieldGuide.mt.gov/detail\_IILEPC1010.aspx



Global Rank: G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS: BLM:



# Beartooth Copper - Lycaena phlaeas arctodon <a href="http://FieldGuide.mt.gov/detail\_IILEPC1014.aspx">http://FieldGuide.mt.gov/detail\_IILEPC1014.aspx</a>



Global Rank: G5T3T5 State Rank: SNR

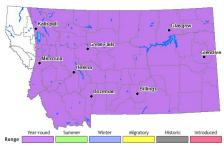
AGENCY STATUS USFWS: USFS: BLM:

# Ruddy Copper - Lycaena rubidus http://FieldGuide.mt.gov/detail\_IILEPC1080.aspx



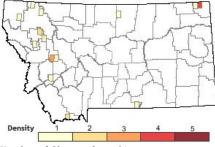
Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Swamp Lymnaea - *Lymnaea stagnalis* http://FieldGuide.mt.gov/detail\_IMGASL2020.aspx





Number of Observations: 21

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Hookleg Clam Shrimp - Lynceus mucronatus <a href="http://FieldGuide.mt.gov/detail\_ICBRA08040.aspx">http://FieldGuide.mt.gov/detail\_ICBRA08040.aspx</a>

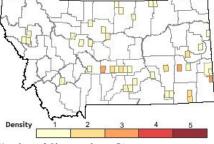


Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - *Maccaffertium terminatum* <a href="http://FieldGuide.mt.gov/detail\_IIEPH40110.aspx">http://FieldGuide.mt.gov/detail\_IIEPH40110.aspx</a>





 $\textbf{Number of Observations} \colon 51$ 

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

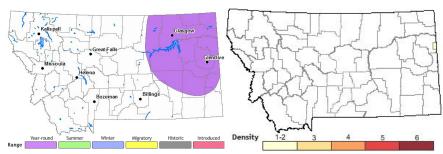
### A Sand-dwelling Mayfly - *Macdunnoa nipawinia* <a href="http://FieldGuide.mt.gov/detail\_IIEPH30030.aspx">http://FieldGuide.mt.gov/detail\_IIEPH30030.aspx</a>



#### **Species of Concern**

Global Rank: G2G3 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

This species is associated with larger, perennially flowing warmwater prairie rivers with sand-gravel dominated bottoms with cobble riffles

# A Millipede - Macromastus marginandus http://FieldGuide.mt.gov/detail\_ITUNI83020.aspx



Global Rank: GNR State Rank: SNR

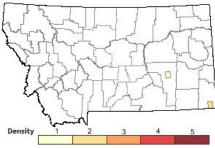
AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Gilded River Cruiser - Macromia pacifica http://FieldGuide.mt.gov/detail\_IIODO26080.aspx



Global Rank: G4 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 3

#### Magnum Mantleslug - Magnipelta mycophaga

http://FieldGuide.mt.gov/detail\_IMGAS61010.aspx

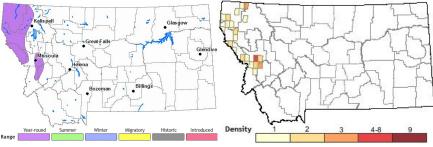


#### **Species of Concern**

Global Rank: G3 State Rank: S2S3

AGENCY STATUS USFWS:

USFS: BLM:



Number of Observations: 39

#### **General Description**

Magnipelta mycophaga does not closely resemble any other described North American slug (Frest and Johannes 1995). In the original description, based on an immature specimen, Pilsbry (1953) states the appearance of Magnipelta mycophaga as "characterized by the structure of the mantle and foot . . . the mantle covering far the greater part of the upper surface. The mantle is free anteriorly for more than one-fourth of its length, smooth, chamois colored with an irregular black stripe on each side and elsewhere unevenly spotted with black. The quite short respiratory slit is slightly post-median on the right side. Length of mantle 16 mm. The foot is lighter colored than the mantle, spotted with black on the flanks posteriorly. It has an irregular polygonal impressed reticulation. The pedal margin is quite narrow, the pedal grooves meeting above the tail without any trace of a caudal pore. The sole is transversely wrinkled at the sides, the middle third smoother, but it is not distinctly triparitie" (p.37-38). In a second preserved and partly contracted specimen collected at a later date the mantle measured 34 mm in length, free anteriorly for 9 mm and posteriorly for 5 mm (Pilsbry and Brunson 1954); in this specimen the slit to the pneumostome was 15 mm from the anterior end of the mantle. Magnipelta mycophaga can be a moderately large slug; a May sample of 12 extended animals ranged from 1.5-6.7 cm (mean = 3.6 cm), a June sample of 20 animals from the same locality ranged from 1.4-8.0 cm (mean = 4.3 cm) (Brunson and Kevern 1963). Two other individuals from widely separate localities measured ca. 7.0 cm and 8.0 cm (Hendricks 2003). Internal anatomy is described and illustrated in Pilsbry (1953), Pilsbry and Brunson (1954), and Webb and Russell (1977).

Taxonomic Comment: The original species description by Pilsbry (1953, see also Pilsbry and Brunson 1954) and placement in the Arionidae are still valid, although Webb and Russell (1977) noted possible alliance with the Camaenidae, based on anatomical features. The genus is monospecific and restricted to the interior Pacific Northwest.

#### Habitat

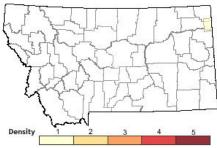
Found in a variety of low- to mid-elevation sites, often with water in the general vicinity. Moist, cool sites in relatively undisturbed forest with an intact duff layer, such as are found in moist valleys, ravines, and talus areas, are preferred (Frest and Johannes 1995). Forest canopy composition at sites includes western redcedar, western hemlock, Engelmann spruce, Douglas-fir, ponderosa pine, western white pine, western larch, lodgepole pine, subalpine fir, grand fir, sometimes with alder, black cottonwood, mountain maple, and paper birch present (Pilsbry and Brunson 1954; Brunson and Kevern 1963; Hendricks 2003; Hendricks et al. 2006, 2007); spruce-fir appears to be the most frequent forest association. The Thompson River, Sanders County location is an area of near-minimal tree canopy cover, though brushy, indicating slugs may move some distance when conditions are favorable, or that the species can persist in some relatively exposed and disturbed habitats (Hendricks 2003). Often found on the ground under pieces of loose bark, logs, loose stones, and in rotted wood; surface-active on cool (10-16°C), wet and overcast days, probably most active at night.

# **Eastern Tent Caterpillar Moth - Malacosoma americanum** <a href="http://FieldGuide.mt.gov/detail\_IILEW0E040.aspx">http://FieldGuide.mt.gov/detail\_IILEW0E040.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# California Forestfly - *Malenka californica* <a href="http://FieldGuide.mt.gov/detail\_IIPLE0J030.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0J030.aspx</a>



Global Rank: G5 State Rank: SNR

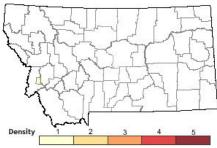
AGENCY STATUS USFWS: USFS: BLM:

# Twisted Forestfly - Malenka flexura <a href="http://FieldGuide.mt.gov/detail\_IIPLE0J070.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0J070.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

### Tiny Forestfly - Malenka tina

http://FieldGuide.mt.gov/detail\_IIPLE0J100.aspx



Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

The larvae are found in small mountain streams (Newell and Minshall 1978). Baumann (personal communication 2005) reported that this species was collected in 1964 in seeps outside the main Big Wood River channel. Most of the Nemouridae species are shredders or collector-gatherers utilizing coarse plant materials (Merritt and Cummins 1996).

# Cattail Mosquito - *Mansonia perturbans* <a href="http://FieldGuide.mt.gov/detail\_IIDIP7G010.aspx">http://FieldGuide.mt.gov/detail\_IIDIP7G010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Western Pearlshell - Margaritifera falcata

http://FieldGuide.mt.gov/detail\_IMBIV27020.aspx

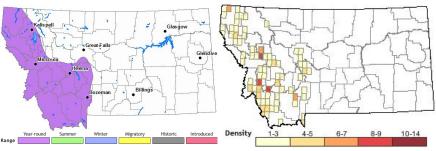


#### **Species of Concern**

Global Rank: G4G5 State Rank: S2

**AGENCY STATUS** USFWS:

USFS: SENSITIVE



#### Number of Observations: 228

#### **General Description**

The western pearlshell is Montana's only coldwater trout stream mussel, and the only native mussel found on the west-side of the state (west of the continental divide). Populations of this mussel on the east-side of the divide in Montana reflect the distribution pattern of it's host fish (westslope cutthroat). The shell of M. falcata is elongate, compressed, dark colored, and slightly concave on the ventral edge, oftentimes erosion marks are prominent on the umbo region (see photo). It has weakly developed teeth and a purple nacre (see photo). The normal size is 50 to 85 mm with larger older specimens surpassing 10 cm. In Montana, this species is similar to Ligumia recta, which is larger, thicker, has better developed teeth, pink nacre and occurs only in warmer rivers much further downstream. Since these species occur in very different habitats the likelihood of misidentifying M. falcata in Montana is virtually impossible.

The species is found in cool and cold running streams that generally have a low to moderate gradient and are wider than 2 m; perferrable habitat is stable sand or gravel substrates. It is found in hard as well as soft water, unlike M. margaritifera (Clarke 1981). In large Idaho river systems (Salmon and Clearwater River Canyons), M. falcata, attains maximum density and age in river reaches where large boulders structurally stabilize cobbles and interstitial gravels. Boulders tend to prevent significant bed scour during major floods, and these boulder-sheltered mussel beds, although rare, may be critical for population recruitment elsewhere within the river, especially after periodic flood scour of less protected mussel habitat. In Idaho's Salmon and Snake River canyon, where reaches are aggrading with sand and gravel, M. falcata is being replaced by Gonidea angulata.

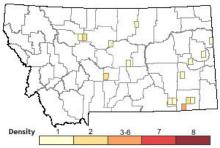
### A Caddisfly - Mayatrichia ayama

http://FieldGuide.mt.gov/detail\_IITRIB4010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 23

#### Habitat

Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.

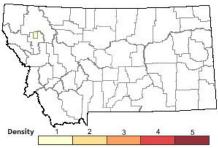
### Giant Needlefly - Megaleuctra stigmata

http://FieldGuide.mt.gov/detail\_IIPLE0G050.aspx



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

This is a small black stonefly in the family; Leuctridae. Like most of the species in the rolled-winged family, this species hatches early in the year often when snow is still on the ground, where they can be noticed quite easily crawling around along the banks of streams.

#### Habitat .

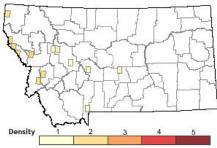
Very little information exists about the ecology of this species (Baumann, Gaufin, and Surdick 1977). Merritt and Cummins (1996) report that members of the genus Megaleuctra are found in small springs and seeps, and are trophically shredder-detritivores.

# **Laramide Springfly - Megarcys signata** http://FieldGuide.mt.gov/detail\_IIPLE27020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Truncate Springfly - Megarcys subtruncata <a href="http://FieldGuide.mt.gov/detail\_IIPLE27030.aspx">http://FieldGuide.mt.gov/detail\_IIPLE27030.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Glacier Springfly - Megarcys watertoni http://FieldGuide.mt.gov/detail\_IIPLE27040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Strecker's Giant Skipper - *Megathymus streckeri* <a href="http://FieldGuide.mt.gov/detail\_IILEP88050.aspx">http://FieldGuide.mt.gov/detail\_IILEP88050.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

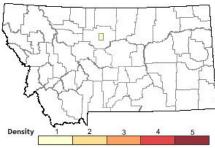


 $\textbf{Number of Observations} \colon 0$ 

# **Zebra Caterpillar Moth - Melanchra picta** http://FieldGuide.mt.gov/detail\_IILEYJ0020.aspx

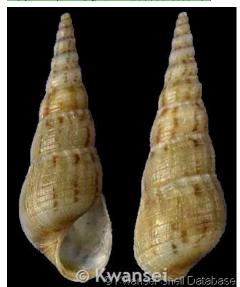


Global Rank: G4 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



### Red-rim Melania - Melanoides tuberculatus

http://FieldGuide.mt.gov/detail\_IMGASK0010.aspx



Number of Observations: 0

#### **General Description**

This exotic snail is introduced in 20 states in the US. It's shell with a high slender spire and decorative colors doesn't resemble any native snail in the west.

This species is rarely found in temporary water bodies but may resist a broad spectrum of environmental conditions (Pointier et al., 2005). We have a record of a shell found in the Powder River (SE corner of Montana), may have come in from WY.

#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

# A Spur-throat Grasshopper - *Melanoplus lanthanus* <a href="http://FieldGuide.mt.gov/detail\_IIORT01D90.aspx">http://FieldGuide.mt.gov/detail\_IIORT01D90.aspx</a>



Global Rank: G1G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Spur-throat Grasshopper - *Melanoplus missoulae* <a href="http://FieldGuide.mt.gov/detail\_IIORT01G50.aspx">http://FieldGuide.mt.gov/detail\_IIORT01G50.aspx</a>



Global Rank: G1 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Spur-throat Grasshopper - *Melanoplus picropidzae* <a href="http://FieldGuide.mt.gov/detail\_IJORT01K80.aspx">http://FieldGuide.mt.gov/detail\_IJORT01K80.aspx</a>



Global Rank: G1G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Rocky Mountain Grasshopper - Melanoplus spretus

http://FieldGuide.mt.gov/detail\_IIORT01010.aspx



Global Rank: GH State Rank: SX

AGENCY STATUS USFWS: USFS: BLM:

#### Number of Observations: 0

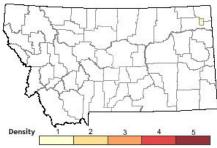
#### **General Description**

Fascinating resource online here: http://www.worldcat.org/title/locust-plague-in-the-united-states-being-more-particularly-a-treatise-on-the-rocky-mountain-locust-or-so-called-grasshopper-as-it-occurs-east-of-the-rocky-mountains-with-practical-recommendations-for-its-destruction/oclc/5639535? title=&detail=&page=frame&url=http%3A%2F%2Fhdl.loc.gov%2Floc.gdc%2Fscd0001.00008890262%26checksum%3D590c9ab987ba01a957a2de91eb1cdd8e&linktype=digitalObject

# Button Sprite - *Menetus opercularis* <a href="http://FieldGuide.mt.gov/detail\_IMGASM7010.aspx">http://FieldGuide.mt.gov/detail\_IMGASM7010.aspx</a>



Global Rank: G5 State Rank: SNR



Number of Observations: 1

# Wine Snowfly - Mesocapnia oenone

http://FieldGuide.mt.gov/detail\_IIPLE06080.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### Number of Observations: 0

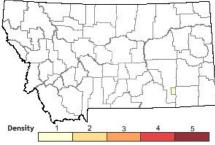
#### **General Description**

Species within the Capniidae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

### A Noctuid Moth - Mesogona olivata

http://FieldGuide.mt.gov/detail\_IILEMTNHP1.aspx





#### Number of Observations: 1

### **General Description**

The Mesogona olivata forewing length is 15 – 20 mm. The ground color of the head, dorsal antennae, thorax, and forewing is variable, ranging from dull tan to reddish brown, gray-brown, or cream. The median area of the forewing and postmedian space at costa are darker than the ground color. The palpi have a mixture of ground color and dark scales. The forewing margin is crenulate. The forewing lines are double, smooth, and are filled with pale color. The basal line is sinuous and evident only near costa. The antemedian line is oblique and undulating. The outer line is dark. The postmedian line is smooth, and laterally convex. The subterminal line is sinuous and indistinct with a series of dark spots between the veins. The terminal line is thin and dark. The orbicular and reniform spots are large and pale with darker filling. The claviform spot is absent. The hindwing is variable with fuscous gray to reddish color that is always suffused with gray scales. Individuals from semi-desert locales tend to be pale while those from more mesic forest are darker (Powell and Opler, 2009).

#### Habitat .

Mesogona olivata prefers dry open forest but also lives in shrub steppe and mesic forest habitats (Powell and Opler).

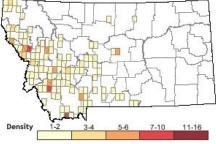
Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

# A Caddisfly - *Micrasema bactro* http://FieldGuide.mt.gov/detail\_IITRI66770.aspx





Number of Observations: 263

Global Rank: G5 State Rank: SNR

# Brown's Microcylloepus Riffle Beetle - Microcylloepus browni

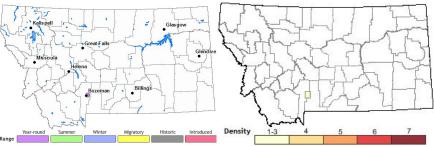
http://FieldGuide.mt.gov/detail\_IICOL5D010.aspx



#### **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 3$

### **General Description**

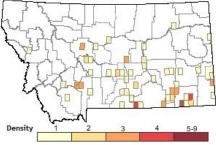
Microcylloepus browni requires warm and flowing surface water with temperatures of 60 to 84° F. This species along with the Zaitzevian warm springs riffle beetle are endemic to Bridger Creek Warm Springs on USFWS property near Bozeman, MT.

#### Habitat

Requires surface flowing warm water with temperatures between 60-84 deg. F; found frequently in muddy areas containing watercress and less of a rocky substrate (Kindschi 1994). These beetles feed on small pieces of algae and diatoms that they scrape from submerged rocks on the gravel bottom and among vegetation. Both Z. thermae and M. browni require warm and flowing surface water with temperatures of 60 to 84° F. They are endemic to Bridger Creek Warm Springs near Bozeman, MT.

# An Elmid Beetle - *Microcylloepus pusillus* <a href="http://FieldGuide.mt.gov/detail\_IICOLD5020.aspx">http://FieldGuide.mt.gov/detail\_IICOLD5020.aspx</a>



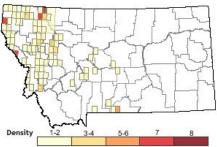


Number of Observations: 86

Global Rank: GNR State Rank: SNR

# Spruce Snail - *Microphysula ingersolli* <a href="http://FieldGuide.mt.gov/detail\_IMGASA7020.aspx">http://FieldGuide.mt.gov/detail\_IMGASA7020.aspx</a>





 $\textbf{Number of Observations} \colon 161$ 

Global Rank: G5 State Rank: S5

# A Caddisfly - Molanna flavicornis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI65480.aspx}}$ 



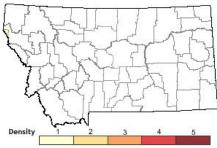
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Millipede - Montaphe elrodi http://FieldGuide.mt.gov/detail\_ITUNI87010.aspx



Global Rank: G5 State Rank: S5



Number of Observations: 1

### Lake Fingernailclam - Musculium lacustre

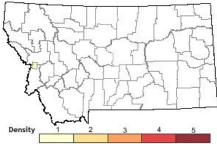
http://FieldGuide.mt.gov/detail\_IMBIV50010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS

USFWS: USFS: BLM:



### Number of Observations: 1

#### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

#### Habitat

The species is most abundant in small lakes and ponds, but is also found in larger lakes, rivers, and creeks. It seems to prefer muddy bottoms. Has been collected from ponds, lakes, and bays. It has also been recorded from ditches, marshes, puddles, muddy brooks, and larger lakes in Europe at an altitude of 1,300 to 1,400 m. In North America "it occurs in swamps, ponds, lakes, or streams on a firm bottom of fine deep or hard packed mud, fine gravel, and hard clay, in water up to 0.6 m deep; it has been collected in water with pH 6.4-7.64, fixed carbon dioxide ratio 9.3-18.87 ppm." (La Rocque 1967:295-296). Clarke (1981:378) indicates the species in found in perennial-water lakes and ponds, and also in rivers and streams of all sizes, and occasionally in roadside ditches.

### Swamp Fingernailclam - Musculium partumeium

http://FieldGuide.mt.gov/detail\_IMBIV50020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

#### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

### Habitat .

The species is found in ponds, small lakes, swamps, and slow-moving streams. It prefers muddy bottoms and is fairly common. It has been collected in various areas including: ponds and eddies in rivers with considerable vegetation and soft bottoms; a creek and a small river; streams; the outlet of a lake; trenches; a brook; summer-dry pools and temporary ponds; ponds in black mud in shallow water (La Rocque 1967:300). Clarke (1981:380) indicates the species is common and occurs in small and large lakes, swamps, ponds, vernal ponds and slow moving streams of all sizes. Usually found in mud.

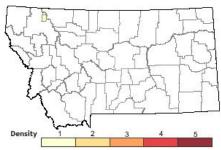
# A Peaclam - Musculium ryckholti

http://FieldGuide.mt.gov/detail\_IMBIV50060.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 1

#### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

# Pond Fingernailclam - Musculium securis

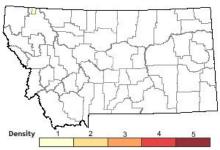
http://FieldGuide.mt.gov/detail\_IMBIV50030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 1

#### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

#### Habitat .

The species is found in ponds, lakes, and rivers; frequently in fine sand. Collections have been made in the following habitats: a swale in water a few inches deep with a muddy bottom; a lake in water plants, 3-5 m deep; an old stone quarry; trenches; a small lake; a creek; "in a small permanent or nearly permanent pond in sandy bottom among dense vegetation in shallow water." (La Rocque 1967:291). Clarke (1981:382) indicates the species occurs in ponds, lakes, rivers and streams of all sizes, and in both vernal and perennial-water habitats. It is usually found in mud among abundant vegetation.

# Long Fingernailclam - Musculium transversum

http://FieldGuide.mt.gov/detail\_IMBIV50040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

#### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

### Habitat .

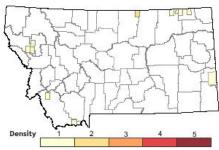
The species is found in large lakes, rivers, and sloughs. It has been recorded in "rivers with strong current, with stony and rocky bottom" and quiet water or slow currents in sand and mud (La Rocque 1967:295).

# A Caddisfly - Mystacides alafimbriatus http://FieldGuide.mt.gov/detail\_IITRI64380.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Mystacides interjectus http://FieldGuide.mt.gov/detail\_IITRIB5020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Mystacides sepulchralis http://FieldGuide.mt.gov/detail\_IITRIB5010.aspx



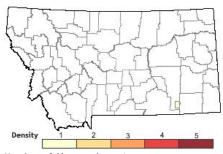
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Noctuid Moth - Mythimna unipuncta

http://FieldGuide.mt.gov/detail\_IILEYJG010.aspx





# Number of Observations: 1

### **General Description**

The Mythimna unipuncta wingspan is 35 - 47 mm. The forewing is tan, and often tinged with orange and lightly speckled with black. The postmedian line is a series of small widely-spaced black dots. The discal spot is white. A black-shaded line slants inward from the apex. The hindwing is grayish-brown with a tan fringe (Powell and Opler, 2009).

The Mythimna unipuncta larvae has a pale brown head with green tinge and mottled with dark brown. The larvae body is smooth, almost hairless, variably yellowish-green to brown to dark gray, and with several dark stripes interspersed with pale lines along top and sides (Powell and Opler, 2009).

Mythimna unipuncta prefers fields, gardens, meadows, and waste places (Powell and Opler, 2009).

Global Rank: G5 State Rank: SNR

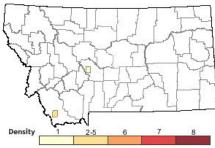
# A Naiadid Worm - Nais behningi

http://FieldGuide.mt.gov/detail\_IAPOL09010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

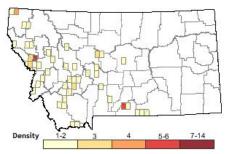


# A Riffle Beetle - Narpus concolor http://FieldGuide.mt.gov/detail\_IICOLHE010.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Dainty Sulphur - Nathalis iole http://FieldGuide.mt.gov/detail\_IILEPB7010.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

Range 🔃

# A Caddisfly - Nectopsyche albida http://FieldGuide.mt.gov/detail\_IITR185030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Nectopsyche candida http://FieldGuide.mt.gov/detail\_IITRI85040.aspx



Global Rank: G5 State Rank: SNR

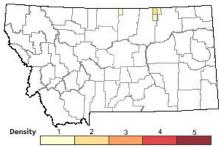
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Nectopsyche diarina http://FieldGuide.mt.gov/detail\_IITRI85060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Nectopsyche lahontanensis http://FieldGuide.mt.gov/detail\_IITRI64420.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

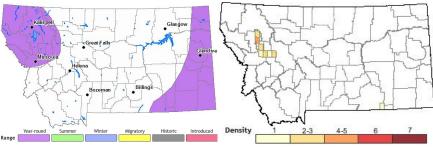
# Sedge Sprite - Nehalennia irene

http://FieldGuide.mt.gov/detail\_IIODO74020.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 20

#### Hahitat

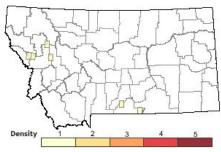
The habitat of the Sedge Sprite is marshy ponds and small lakes, beaver ponds and marl ponds, as well as sedge fens, sedge meadows, bogs, fens, and vernal pools all with abundant grassy or sedge vegetation (Westfall and May 1996, Nikula et al. 2002, Acorn 2004, Paulson 2009).

# A Limnephilid Caddisfly - Nemotaulius hostilis http://FieldGuide.mt.gov/detail\_IITRIA5010.aspx



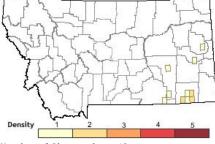
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Neochoroterpes oklahoma http://FieldGuide.mt.gov/detail\_IIEPH67020.aspx





Number of Observations: 13

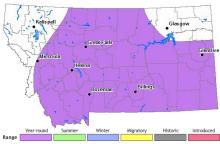
Global Rank: G5 State Rank: SNR

# Riding's Satyr - Neominois ridingsii http://FieldGuide.mt.gov/detail\_IILEPP0010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Wyoming Satyr - Neominois wyomingo http://FieldGuide.mt.gov/detail\_IILEPP0020.aspx



Global Rank: G3G4Q State Rank: SNR

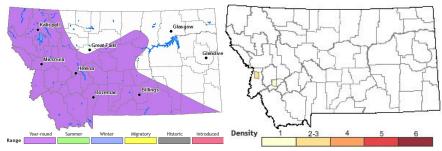
AGENCY STATUS USFWS: USFS: BLM:



# Pine White - Neophasia menapia http://FieldGuide.mt.gov/detail\_IILEP99010.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 5$ 

# A Caddisfly - Neophylax concinnus

http://FieldGuide.mt.gov/detail\_IITRIA3030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

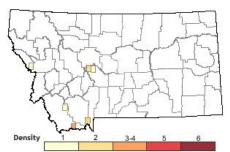
#### **General Description**

Neophylax caddisflies are a medium-sized insect (~3/4-1 inch) and adults which resemble moths, but fold their wings tent-like above their backs are commonly known as Autumn sedges. As larvae they are scrapers of algae and diatoms from cold river bottom rocks and cobbles, and emerge in concentrated numbers in the fall because they enter a pupal diapause within their rock/pebble cases during the summer (Diapause: A state of complete dormancy deeper even than hibernation. While in diapause, an organism does not move around, eat, or even grow). Some caddisfly larvae enter diapause for a few weeks to several months during the summer, which synchronizes their emergence to within three weeks on a given stretch of stream.

# A Caddisfly - Neophylax occidentis

http://FieldGuide.mt.gov/detail\_IITRI66710.aspx





Number of Observations: 11

### **General Description**

Neophylax caddisflies are a medium-sized insect (~3/4-1 inch) and adults which resemble moths, but fold their wings tent-like above their backs are commonly known as Autumn sedges. As larvae they are scrapers of algae and diatoms from cold river bottom rocks and cobbles, and emerge in concentrated numbers in the fall because they enter a pupal diapause within their rock/pebble cases during the summer (Diapause: A state of complete dormancy deeper even than hibernation. While in diapause, an organism does not move around, eat, or even grow). Some caddisfly larvae enter diapause for a few weeks to several months during the summer, which synchronizes their emergence to within three weeks on a given stretch of stream.

Global Rank: G5 State Rank: SNR

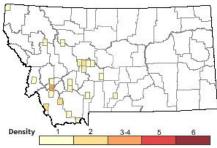
# A Caddisfly - Neophylax rickeri

http://FieldGuide.mt.gov/detail\_IITRI66720.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 29

#### **General Description**

Neophylax caddisflies are a medium-sized insect (~3/4-1 inch) and adults which resemble moths, but fold their wings tent-like above their backs are commonly known as Autumn sedges. As larvae they are scrapers of algae and diatoms from cold river bottom rocks and cobbles, and emerge in concentrated numbers in the fall because they enter a pupal diapause within their rock/pebble cases during the summer (Diapause: A state of complete dormancy deeper even than hibernation. While in diapause, an organism does not move around, eat, or even grow). Some caddisfly larvae enter diapause for a few weeks to several months during the summer, which synchronizes their emergence to within three weeks on a given stretch of stream.

# A Caddisfly - Neophylax sinuatus

http://FieldGuide.mt.gov/detail\_IITRIA3170.aspx



Global Rank: G1G3 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Number of Observations: 0

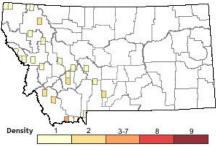
#### **General Description**

Neophylax caddisflies are a medium-sized insect (~3/4-1 inch) and adults which resemble moths, but fold their wings tent-like above their backs are commonly known as Autumn sedges. As larvae they are scrapers of algae and diatoms from cold river bottom rocks and cobbles, and emerge in concentrated numbers in the fall because they enter a pupal diapause within their rock/pebble cases during the summer (Diapause: A state of complete dormancy deeper even than hibernation. While in diapause, an organism does not move around, eat, or even grow). Some caddisfly larvae enter diapause for a few weeks to several months during the summer, which synchronizes their emergence to within three weeks on a given stretch of stream.

# A Caddisfly - Neophylax splendens

http://FieldGuide.mt.gov/detail\_IITRI66730.aspx





 $\textbf{Number of Observations} \colon 34$ 

### **General Description**

Neophylax caddisflies are a medium-sized insect (~3/4-1 inch) and adults which resemble moths, but fold their wings tent-like above their backs are commonly known as Autumn sedges. As larvae they are scrapers of algae and diatoms from cold river bottom rocks and cobbles, and emerge in concentrated numbers in the fall because they enter a pupal diapause within their rock/pebble cases during mid-summer (Diapause: A state of complete dormancy deeper even than hibernation. While in diapause, an organism does not move around, eat, or even grow). Some caddisfly larvae enter diapause for a few weeks to several months during the summer, which synchronizes their emergence to within three weeks on a given stretch of stream.

Global Rank: G5 State Rank: SNR

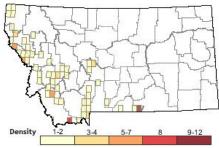
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Neothremma alicia http://FieldGuide.mt.gov/detail\_IITRI66740.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Neotrichia ersitis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI50180.aspx}}$ 



Global Rank: G1G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

Hahitat

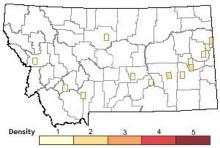
# A Caddisfly - Neotrichia halia

http://FieldGuide.mt.gov/detail\_IITRI63860.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

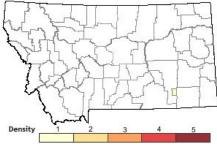


 $\textbf{Number of Observations} \colon 16$ 

# A Noctuid Moth - Nephelodes minians

http://FieldGuide.mt.gov/detail\_IILEYJV010.aspx





### Number of Observations: $\boldsymbol{1}$

### **General Description**

The Nephelodes minians wingspan is about 40 mm. The forewing ground color is extremely variable, and ranges from light tan/yellowish, to pinkish, rosy, rusty, grayish, or various shades of brown. A dark U-shaped band surrounds the reniform spot medially.

The Nephelodes minians larvae head is large, and is colored tan to honey. The larvae body is thick, dark brown with a bronzy sheen. There are three yellowish dorsal stripes that extend along body (Powell and Opler, 2009).

Global Rank: G5 State Rank: SNR

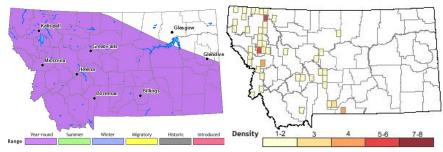
AGENCY STATUS USFWS: USFS: BLM:

# Blue Glass - Nesovitrea binneyana http://FieldGuide.mt.gov/detail\_IMGAS76010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



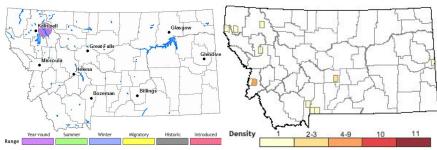
# Amber Glass - Nesovitrea electrina

http://FieldGuide.mt.gov/detail\_IMGAS76030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Neureclipsis bimaculata http://FieldGuide.mt.gov/detail\_IITRI65730.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Neureclipsis crepuscularis <a href="http://FieldGuide.mt.gov/detail\_IITRIB6010.aspx">http://FieldGuide.mt.gov/detail\_IITRIB6010.aspx</a>



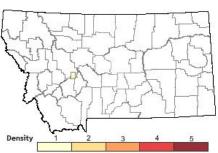
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Lesser Yellow Underwing - Noctua comes

http://FieldGuide.mt.gov/detail\_IILEYMY020.aspx





Number of Observations: 1

# **General Description**

Adults of the Lesser Yellow Underwing Moth (Noctua comes) have pale brown camouflaged forewings and bright yellow-orange hindwings with hooked, dark border markings. The larvae are smooth and grayish with dark flecked markings (Natural England no date).

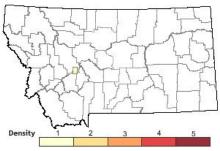
Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Large Yellow Underwing - Noctua pronuba

http://FieldGuide.mt.gov/detail\_IILEYMY010.aspx





### Number of Observations: 1

### **General Description**

The Large Yellow Underwing Moth (Noctua pronuba) can have variable coloring. It has brownish camouflaged forewings and bright yellow hindwings with distinct hooked dark markings (Natural England no date).

The last-instar larvae is pale reddish brown dorsally and laterally, and is pinkish brown below the spiracles. The middorsal line is narrow, broken, and bordered by black speckling. There is a subdorsal white line that is most prominant on the anterior half of each abdominal segment. The abdominal segements have black dashes, and the subdorsal area has faint oblique dashes formed by dark speckling that comprises a herringbone pattern. The spiracles are yellow brown. The head is pale yellow brown with darker brown coronal stripes and reticulation (Powell and Opler 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

# Simius Roadside Skipper - Notamblyscirtes simius

http://FieldGuide.mt.gov/detail\_IILEP80010.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 0$ 

Small dark skipper. The dark ground color of the wings is relieved by variably expressed light spots or bands, fulvous or gray overscaling, and checkering or lightening of the fringes. The sexes are similar, but the males have variably developed small stigmas. The body is less robust than that of adjacent genera. The small (male FW [forewing] 1.3-1.4cm) but related wings are dark with very subtly checkered light fringes. Slight to extensive fulvous overscaling above tends to obscure the chevron-shaped postdiscal fulvous FW band and punctate cell spot as well as the postdiscal HW [hindwing] patch. Males have a small gray stigma. White overscaling and postdiscal markings are conspicuous beneath. The antennae are 0.45 FW length with very short apiculus. The fore tibiae are spined, but the hind tibiae have no spines and only one pair of spurs (Ferris and Brown, 1981). Eggs creamy-white developing a reddish ring. Laid singly under host leaves (Scott, 1986).

Shortgrass and mixed-grass prairie and open pinyon-juniper woodland (B86SC001COUS).

# A Caddisfly - Nyctiophylax affinis http://FieldGuide.mt.gov/detail\_IITRIA1050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Nyctiophylax moestus http://FieldGuide.mt.gov/detail\_IITRIA1040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

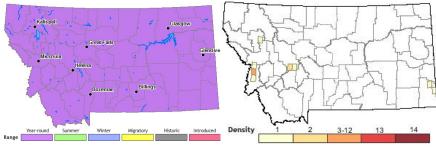
# Mourning Cloak - Nymphalis antiopa

http://FieldGuide.mt.gov/detail\_IILEPK6030.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 20

### **General Description**

The Mourning Cloak (Nymphalis antiopa) has short projections on both wings. The wing borders are irregular. The upperside is purple-black with a wide, bright yellow border on the outer margins. The upperside has a row of iridescent blue spots at the inner edge of the border. The wing span is about 57 - 101 mm (Opler, Lotts, and Naberhaus 2010).

#### Habita

Because Mourning Cloaks roam and migrate, they are found almost anywhere that host plants occur including woods, openings, parks, and suburbs; and especially in riparian areas (Opler et al. 2010).

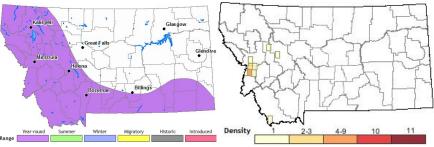
# California Tortoiseshell - Nymphalis californica

http://FieldGuide.mt.gov/detail\_IILEPK6020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 19

### **General Description**

The upperside of the California Tortoiseshell (*Nymphalis californica*) is orange-brown with large black spots and dark wing borders. The underside looks like a dead leaf and is dark mottled brown with darker wing bases. The hindwing does not have a centered silver spot. The wing span is about 32 - 70 mm (Opler et al. 2010). The mature larva is velvety black with two diffuse, yellow dorsal lines and orange-brown, branched spines (Guppy and Shepard 2001).

### Habitat .

Chaparral, woodland, brush areas, forest clearings and edges (Opler et al. 2010).

# Compton Tortoiseshell - Nymphalis I-album <a href="http://FieldGuide.mt.gov/detail\_IILEPK6010.aspx">http://FieldGuide.mt.gov/detail\_IILEPK6010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

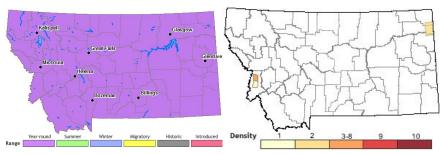


# Garita Skipperling - *Oarisma garita* http://FieldGuide.mt.gov/detail\_IILEP57020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



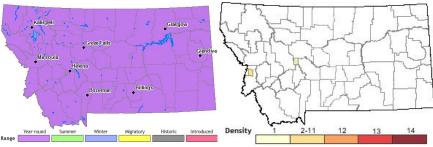
# Woodland Skipper - Ochlodes sylvanoides

http://FieldGuide.mt.gov/detail\_IILEP72010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 13

### **General Description**

The Woodland Skipper's upperside is orange with toothed brown borders. The forewing has a black stigma (male) or a black diagonal band (female). The hindwing has a large reddish patch. The underside varies from yellow to reddish to brown, and the hindwing varies from unmarked to having a distinct band of cream to yellow spots. The wing span is about 25 - 32 mm (Opler et al. 2010).

The first instar larvae are cream in colour with a black head (Bird et al. 1995). The mature larvae have variously been described as yellowish with two dark bands (Bird et al. 1995) or seven black longitudinal lines (Opler 1999). The head is black or creamy tan (Opler 1999). The pupae are yellowish tan in colour (Bird et al. 1995).

### Habitat .

Grassy areas in chaparral, sagebrush, woodland, gardens, and small streams (Opler et al. 2010).

# Alsea Ochrotrichian Micro Caddisfly - Ochrotrichia alsea

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI41030.aspx}}$ 



Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

# A Caddisfly - Ochrotrichia oregona

http://FieldGuide.mt.gov/detail\_IITRI63890.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

Habitat

# A Caddisfly - Ochrotrichia potomus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI63910.aspx}}$ 



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

lahitat

# A Caddisfly - Ochrotrichia stylata

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI41550.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

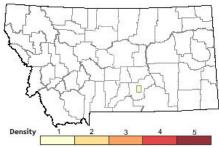
Habitat

# A Caddisfly - Oecetis avara http://FieldGuide.mt.gov/detail\_IITRI2G090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# A Caddisfly - Oecetis disjuncta

http://FieldGuide.mt.gov/detail\_IITRI2G260.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Oecetis immobilis

http://FieldGuide.mt.gov/detail\_IITRI2G140.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Oecetis inconspicua

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2G120.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Oecetis ochracea

http://FieldGuide.mt.gov/detail\_IITRI64450.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Saskatoon Willowfly - *Oemopteryx fosketti* <a href="http://FieldGuide.mt.gov/detail\_IIPLE0X020.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0X020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Alberta Arctic - Oeneis alberta

http://FieldGuide.mt.gov/detail\_IILEPP1060.aspx



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



# White-veined Arctic - Oeneis bore

http://FieldGuide.mt.gov/detail\_IILEPP1080.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 0

This little gray brown wood nymph has wings that are translucent, veins are usually white. Upperside is gray-brown with no eyespots. Underside is light brown; hindwing has a dark median band outlined in white. Found to occur in Montana in the Beartooths and Yellowstone Park.

### Habitat .

Tundra, grassy alpine slopes, and subarctic bogs.

# Chryxus Arctic - *Oeneis chryxus* <a href="http://FieldGuide.mt.gov/detail\_IILEPP1040.aspx">http://FieldGuide.mt.gov/detail\_IILEPP1040.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

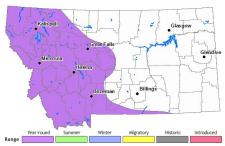


# Jutta Arctic - *Oeneis jutta* http://FieldGuide.mt.gov/detail\_IILEPP1090.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Melissa Arctic - Oeneis melissa

http://FieldGuide.mt.gov/detail\_IILEPP1100.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



 $\overline{\textbf{Number of Observations}}\colon 0$ 

### **General Description**

The Arctic Melissa wings are translucent, wing fringes are often checkered. Upperside is gray-brown with faint or absent eyespots. Underside of hindwing is mottled black and gray; median band is lacking or faint with white outlines.

#### Habitat .

Tundra, talus slopes, rocky summits and saddles, frost-heaved clear-cuts. Larval host plant numerous sedges.

# Polixenes Arctic - Oeneis polixenes http://FieldGuide.mt.gov/detail\_IILEPP1110.aspx



Global Rank: G5 State Rank: SNR

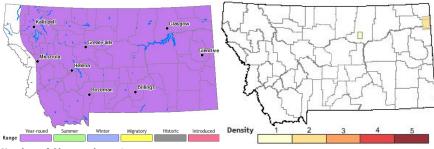
AGENCY STATUS USFWS: USFS: BLM:

# Uhler's Arctic - Oeneis uhleri

http://FieldGuide.mt.gov/detail\_IILEPP1050.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 4

# A Noctuid Moth - Oligia divesta

http://FieldGuide.mt.gov/detail\_IILEYCB040.aspx





Number of Observations: 2

# **General Description**

C. divesta larvae are pale black tinged with purple, and with a yellow mid-dorsal line and yellow subdorsal stripes. The spiracles are brown and the head is pale brown with dark brown flecks (Powell and Opler 2009).

Global Rank: G4 State Rank: SNR

# A Caddisfly - Oligophlebodes minutus http://FieldGuide.mt.gov/detail\_IITRI17050.aspx



 $\textbf{Number of Observations} \colon 0$ 

Global Rank: G5 State Rank: SNR

# $\textbf{Tombstone Prairie Oligophiebodes Caddisfly - \textit{Oligophlebodes mostbento}} \\ \underline{\text{http://FieldGuide.mt.gov/detail\_IITR117010.aspx}}$



 $\textbf{Number of Observations} \colon 0$ 

Global Rank: G3 State Rank: SNR

# A Caddisfly - Oligophlebodes ruthae <a href="http://FieldGuide.mt.gov/detail\_IITRI17040.aspx">http://FieldGuide.mt.gov/detail\_IITRI17040.aspx</a>



Number of Observations: 0

Global Rank: G5 State Rank: SNR

# A Caddisfly - Oligophlebodes sierra http://FieldGuide.mt.gov/detail\_IITRI66750.aspx



 $\textbf{Number of Observations} \colon 0$ 

Global Rank: G5 State Rank: SNR

# A Caddisfly - Oligophlebodes sigma http://FieldGuide.mt.gov/detail\_IJTRI66760.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

# A Caddisfly - Oligophlebodes zelti http://FieldGuide.mt.gov/detail\_IITRI17030.aspx



 $\textbf{Number of Observations} \colon 0$ 

Global Rank: G4G5 State Rank: SNR

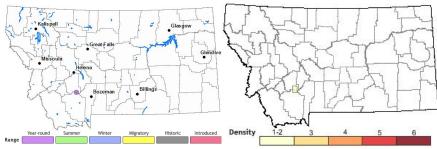
# A Springtail - Oncopodura cruciata http://FieldGuide.mt.gov/detail\_IICLL18090.aspx



## **Species of Concern**

Global Rank: G1G2 State Rank: S1S2





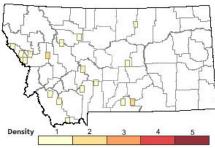
Number of Observations: 2

# A Caddisfly - Onocosmoecus unicolor http://FieldGuide.mt.gov/detail\_IITRIE9020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 21

# Sinuous Snaketail - Ophiogomphus occidentis

http://FieldGuide.mt.gov/detail\_IIODO12140.aspx

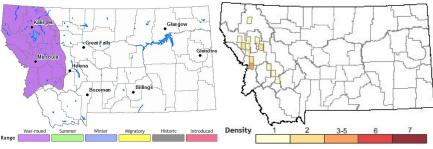


## **Potential Species of Concern**

Global Rank: G4 State Rank: S2S4

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 20$ 

## **General Description**

A more restrictive range western snaketail with distinctive anterior striped thorax (Paulson 2009). Found in slow flowing sandy to rocky streams and rivers throughout the western part of the state. Overlaps in the western part of the state with the Pale Snaketail, but can usually be found in larger streams than this species.

## Habitat

The Sinuous Snaketail prefers slow-flowing, sandy and gravelly, large streams and rivers usually in mountainous areas at lower elevations. They have also been encountered at lakes with rock or gravel bottoms in the northern part of their range, although it is unknown if they do indeed breed at these locations (Dunkle 2000, Paulson 2009).

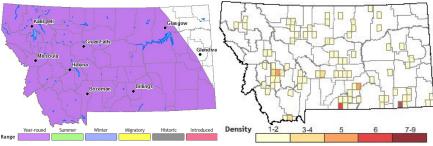
# Pale Snaketail - Ophiogomphus severus

http://FieldGuide.mt.gov/detail\_IIODO12160.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 139

## **General Description**

A wide ranging western snaketail with a lightly marked thorax (Paulson 2009). Found in sandy to rocky streams and rivers throughout the state. Overlaps in the western part of the state with the Sinuous Sanketail, but can usually be found in smaller streams than this other species.

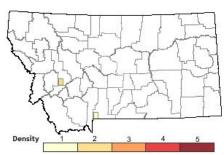
## Habitat

The habitat of the Pale Snaketail is usually sandy and rocky rivers and streams with moderate current in forested and open landscapes, as well as large sandy lakes in the northern part of their range (Dunkle 2000, Paulson 2009).

# A Riffle Beetle - *Optioservus divergens* http://FieldGuide.mt.gov/detail\_IICOL5E040.aspx



Global Rank: GNR State Rank: SNR



Number of Observations: 3

# A Riffle Beetle - *Optioservus ovalis* <a href="http://FieldGuide.mt.gov/detail\_IICOL5E070.aspx">http://FieldGuide.mt.gov/detail\_IICOL5E070.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

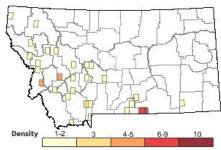
 $\textbf{Number of Observations} \colon 0$ 

# A Riffle Beetle - *Optioservus quadrimaculatus* <a href="http://FieldGuide.mt.gov/detail\_IICOL5E050.aspx">http://FieldGuide.mt.gov/detail\_IICOL5E050.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

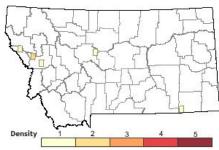


Number of Observations: 62

# A Riffle Beetle - *Optioservus seriatus* http://FieldGuide.mt.gov/detail\_IICOL5E080.aspx



Global Rank: GNR State Rank: SNR

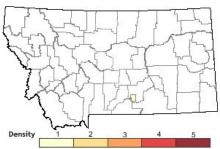


Number of Observations: 6

# Calico Crayfish - Orconectes immunis

http://FieldGuide.mt.gov/detail\_ICMAL11450.aspx





## Number of Observations: 1

## **General Description**

Rostrum acuminate, acarinate and with converging margins lacking marginal spines or shoulders; cervical spines present; areola narrow with 2-3 punctations in narrowest part; male with hooks on ischia of 3rd pereiopods; male first pleopod terminating in 2 subparallel elements <25% length of pleopod, curved throughout length but distal 1/3 more pronounced so that apices of both elements directed at about 90 degrees to main axis of pleopod (Page, 1985). [LENGTH: to 50 TCL; to 95 TL] [WIDTH: to 25]

#### Habitat

The species is always in, at best, sluggish flow (unlike O. virilis which can tolerate moderately flowing rivers); burrows during drying periods (i.e., tertiary burrower). In Missouri, it occurs in shallow ditches and sloughs on the broad, flat flood plains of large to medium-sized rivers and in the isolated pools of intermittent headwater streams draining level upland prairies. Wide seasonal fluctuations in water area and depth (with many areas becoming entirely dry during late summer), deep mud bottoms and absence of strong flow or current are common characteristics of these habitats. However, large populations also occurred in habitats where high turbidity provided the only cover (Pflieger, 1996).

Global Rank: G5 State Rank: SNR

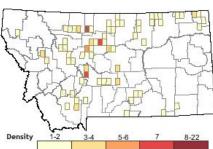
**AGENCY STATUS** 

USFWS: USFS: BLM:

# Virile Crayfish - Orconectes virilis

http://FieldGuide.mt.gov/detail\_ICMAL11670.aspx





Number of Observations : 172

## **General Description**

A medium-large crayfish (5-6 inches max length) that is native to eastern Montana but has been invading westward the last 30 years. Most distinguishing features are the red/orange tips on the ends of the claws. The rostrum is acuminate, acarinate, margins slightly converging and terminating in spines or sharply angular shoulders; cervical spines present; areola narrow with 2-3 punctations in narrowest part; male with hooks on ischia of 3rd pereiopods; male 1st pleopod terminating in 2 somewhat divergent slighly curved elements constituting 50% of total length of pleopod, central projection longer and with distal third smoothly curved so that apex directed caudally, lacking shoulder on cephalic margin of pleopod (Hobbs, 1976). [LENGTH: 70mm Carapace Length to 150mm Total Length].

## Habitat

According to Collicut (1998), O. virilis can be found in lakes, rivers, streams and and ponds. They are found in permanent bodies of water deep enough not to freeze solid or experience low oxygen levels. O. virilis requires shelter in the form of rocks, logs, or thick vegetation in which to hide from predators during daylight hours. In MT, this species needs perennial water bodies and can survive in both flowing streams and rivers or pooled-up prairie streams, prefers cobbles and large woody debris for protection but can inhabit some silted areas if aquatic vegetation is present.

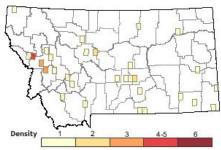
Global Rank: G5 State Rank: S5

# A Riffle Beetle - Ordobrevia nubifera

http://FieldGuide.mt.gov/detail\_IICOLHF010.aspx



Global Rank: GNR State Rank: SNR



Number of Observations: 41

# A Predaceous Diving Beetle - *Oreodytes quadrimaculatus* <a href="http://FieldGuide.mt.gov/detail\_IICOL81100.aspx">http://FieldGuide.mt.gov/detail\_IICOL81100.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

## Alpine Mountainsnail - Oreohelix alpina

http://FieldGuide.mt.gov/detail\_IMGASB5010.aspx



# Kate pell Glas gow Glas

## Number of Observations: 13

## **General Description**

Descriptions of shells from the Mission Mountains are provided in Elrod (1901, 1902, 1903), Pilsbry (1939), Hendricks (1998), and Fairbanks (2002); reproductive anatomy is described in Fairbanks (2002). Description from Pilsbry (1939) follows: "shell small; brownish-gray, tending toward light horn color, in dead shells turning to pearly white; luster somewhat silky; shell flat, little elevated; . . . aperture nearly circular, . . . somewhat higher than wide; markings as in strigosa, the upper band continuing in the spire, gradually disappearing; umbilicus medium, circular, deep, subcylindric." Shell diameter 7-10 mm, average of ten specimens, 8.91 mm, shell height 3-5mm, whorls 4.0-4.5. Hendricks (1998) reported range in diameter of 16 live shells = 2.5-8.5 mm, nine dead shells = 8.0-9.6 mm. Shells from the Swan Range may average slightly larger in diameter: average of 13 was 9.4 mm, range 5.7-11.4 mm (Hendricks 2003); average of four was 9.3 mm, range 8.5-11.1 mm (Fairbanks 2002). Diameter of specimens from the Scapegoat Plateau (n = 62) averaged 7.7 mm, range 2.4-11.7 mm (P. Hendricks personal observation).

Taxanomic Comment: Originally named *Pyramidula strigosa alpina* by Elrod (1901, 1903). Pilsbry (1939) expressed some doubt about the validity of this taxon, but later examination of material by Frest and Johannes (1995) and Fairbanks (2002) indicate treatment as a full species is appropriate. Pilsbry (1933) placed *Oreohelux alpina* with the *O. strigosa* group, as did Elrod (1901, 1902, 1903), but later (Pilsbry 1939) moved it to the *O. subrudis* group. Recent study of the internal anatomy (Fairbanks 2002) indicates affinity with the *O. strigosa* group. Pilsbry (1939) placed all *Oreohelux* in the Xanthonycidae.

## Habitat

Oreohelix alpina occupies open talus slopes at high elevations near and above treeline (Elrod 1902, 1903; Hendricks 1998). Vegetation at and near the alpine type locality on East St. Marys Peak in the Mission Mountains (Hendricks 1998) includes snow cinquefoil (Potentilia nivea), mountain avens (Dryas octopetala), alpine sorrel (Oxyria digyna) and moss campion (Silene acaulis). Subalpine fir (Abies lasiocarpa) is present at the margins of the subalpine site above Lower Rumble Lake in the Swan Range (Hendricks 2003). Rock substrate at all known sites is limestone. Live shells are found on surfaces of limestone blocks, but often in the absence of direct sunlight (shaded areas and undersides of smaller blocks). Block size where 0. alpina was found on St Marys Peak averaged 20 x 30 cm square and 4-8 cm thick (Hendricks 1998), block size at the Swan Range site ranged from 15 x 15 x 4 cm to 1 m3 (Hendricks 2003). Some soil development and leaf litter was present at each site where live snails were found; one group of live snails was found in leaf litter near the base of snow cinquefoil partially protected overhead by rock.

#### **Species of Concern**

Global Rank: G1 State Rank: S1

# Bitterroot Mountainsnail - Oreohelix amariradix

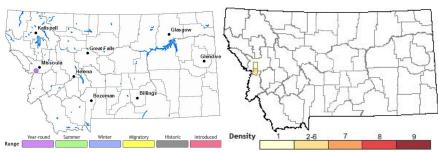
http://FieldGuide.mt.gov/detail\_IMGASB5020.aspx



#### **Species of Concern**

Global Rank: G1G2 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 8

## **General Description**

Pilsbry (1933, 1939) describe the shell as "openly umbilicate, the umbilicus contained about 4 times in the diameter; biconvex with the periphery rather sharply angular, the angle disappearing on the last third of a whorl. Whorls 5 1/3, the embryonic 2 1/3 moderately convex and nearly smooth. Subsequent whorls rather coarsely and irregularly wrinklestriate, without spiral striation, but there is often a spiral impression above the suture on the penult whorl. The last whorl descends shortly in front. Aperture rather strongly oblique, . . . The specimens . . . show a reddish band immediately below the periphery, another a short distance above it." Shell height 8.5 mm, diameter 14.5 mm. Elrod (1903) gives height of 10 shells 5.3-7.4 mm, diameter 11.9-16.7 mm; number of whorls 4.8-5.4. Fairbanks (1980) gives height of 6.9-10.9 mm and diameter of 12.8-17.9 mm for 21 specimens from another site nearby; number of whorls 4.75-5.5.

Taxanomic Comment: Originally identified by Elrod (1901, 1902, 1903) as a "small variety" of *Oreohelix* (=*Pyramidula*) *strigosa* from the Bitterroot Mountains, but described by Pilsbry (1933) as a full species of the *O. strigosa* group, based only on dead shells. Fairbanks' (1980) analysis of the internal anatomy confirmed Pilsbry's designation. Pilsbry (1939) placed all *Oreohelix* in the Xanthonycidae.

#### Habitat

This species occupies small talus slides, primarily the basal portions (Frest and Johannes 1995), scattered among open grassy, south facing slopes that become quite dry in mid-summer (Elrod 1903, Fairbanks 1980). Vegetation at one site included bunch grasses, ponderosa pine (*Pinus ponderosa*), serviceberry (*Amelanchier alnifolia*), and ninebark (*Physocarpus malvaceus*).

# Keeled Mountainsnail - Oreohelix carinifera

http://FieldGuide.mt.gov/detail\_IMGASB5060.aspx



## **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



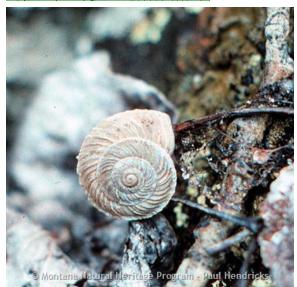
Number of Observations: 14

## Habitat

This species occupies small limestone outcrops and sandy limestone soils on arid slopes with sparse vegetation cover; described sites have been south-facing (Frest and Johannes 1995, L. Fairbanks personal communication). Vegetation at sites includes open stands of sagebrush (*Artemisia*), juniper (*Juniperus*) and Douglas-fir (*Pseudotsuga menziesii*). Individuals have often been found under shrubs and junipers.

# Carinate Mountainsnail - Oreohelix elrodi

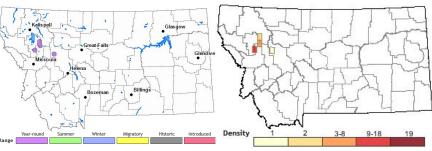
http://FieldGuide.mt.gov/detail\_IMGASB5090.aspx



## **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 29

# **General Description**

Pilsbry (1900, 1939) describes the shell as "strongly depressed, biconvex, acutely carinate, with open umbilicus contained about 4 times in the diameter; pale vinaceous fawn color to nearly white (under a fugacious light brownish cuticle which is lost in all adult shells seen). Spire low conoidal, often much depressed. Embryonic shell of 2 1/3 to 2 2/3 whorls, the first smooth, the rest varying from unevenly striate to finely costellate. Later whorls are coarsely sculptured with rude, unequal, retractive ribs, usually narrower than their intervals, which are densely and finely striate spirally. . . . The last whorl descends shortly in front. Aperture angular at termination of the keel." Shell diameter 21-28 mm (Pilsbry 1939), 17.4-26.0 mm (Fairbanks 1984), 4.1-22.6 mm (Hendricks 1998); shell height 8.8-13.3 mm (Pilsbry 1939), 8.4-13.1 mm (Fairbanks 1984); whorls 5-5 ½ (Pilsbry 1939), 5-5 ¼ (Fairbanks 1984). Shell diameter of new-born young 3.6-3.7 mm; whorls 2.3-2.5 (Hendricks 2003). The internal anatomy is described in Pilsbry (1939) and Fairbanks (1984). A population of this species (or a closely related undescribed form) found in alpine terrain on the Scapegoat Plateau in 2007 (P. Hendricks personal observation) was significantly smaller in average diameter (10.5 mm, range 3.2-14.7 mm), with no individuals > 15 mm diameter and 4.5 whorls out of over 500 encountered.

Taxanomic Comment: Originally named *Pyramidula elrodi* by Pilsbry (1900). Affinities of this species are with the *Oreohelix strigosa* group (Pilsbry 1933, Frest and Johannes 1995), based on the internal anatomy (see Pilsbry 1939); additional description of the internal anatomy is available in Fairbanks (1984). Pilsbry (1939) placed all *Oreohelix* in the Xanthonycidae.

## Habitat

This species occupies course talus, typically on south-facing slopes, and usually with sparse canopy of ponderosa pine (*Pinus ponderosa*), mountain ash (*Sorbus*) and serviceberry (*Amelanchier*) (Frest and Johannes 1995). Hendricks (1998) described vegetation at three talus sites in the Mission Range, each with 0% canopy cover in the search areas, as bordered by Douglas-fir (*Pseudotsuga menziesii*) and ponderosa pine with pockets of water birch (*Betula occidentalis*), quaking aspen (*Ppopulus tremuolides*) and mock orange (*Philadelphus lewisii*). At the three Swan Range locations, portions of the occupied terrain (Hendricks unpublished data) are in talus under a forest canopy variably composed (depending on microsite) of Douglas-fir, ponderosa pine, quaking aspen, western red cedar (*Thuja plicata*), paper birch (*B. papyrifera*) and western larch (*Larix occidentalis*); canopy cover is 0-10%. On the Scapegoat Plateau, there is no overhead canopy, although the species is present under rocks in relatively stable low-angle talus sites.

Elrod (1902) considered *O. elrodi* to be "a shell of the rocks" (p. 117), present on the surface of exposed talus during favorable conditions, and present down among the stones when conditions become dry (Elrod 1903). During favorable surface conditions (wet, 10-17°C) live individuals are found attached to rocks near the surface but more often are present on organic litter accumulations within the talus; some aestivating mature individuals (18-21 mm diameter) are found near the talus surface during dry and warm (21-23°C) conditions (Hendricks 1998).

Occupied talus at the Mission Range site is described by Berry (1955) and Frest and Johannes (1995) as limestone. However, Hendricks (1998) found *O. elrodi* in this mountain range at sites comprised mostly of diorite and/or argillite; rock type at the two occupied sites in the Swan Range is also argillite (Hendricks unpublished data). On the Scapegoat Plateau the occupied talus is limestone (P. Hendricks personal observation), unlike at the other documented sites. Clast (fragment) size of the rocks comprising occupied talus ranges from 10 x 20 x 10 cm to 1 m3 at the Mission Range sites (Hendricks 1998), and 10 x 10 x 10 cm to 0.5 x 0.5 m at the Swan Range sites (Hendricks unpublished data). Measured slope at occupied sites in both mountain ranges was 25-369 (Hendricks 1998, unpublished data). How deep into talus slopes this species occurs is unknown, but live individuals were found up to a meter below the surface at the Mission Range microsite co-occupied by *Discus brunsoni* (see Hendricks 1998).

# Lyrate Mountainsnail - Oreohelix haydeni

http://FieldGuide.mt.gov/detail\_IMGASB5140.aspx

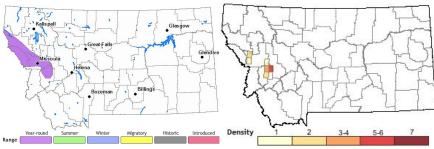


## **Species of Concern**

Global Rank: G2G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 16$ 

## **General Description**

A distinctive medium to large-sized shell, to 22 mm diameter and 13 mm in height but usually smaller; flattened-heliciform, depressed somewhat in profile, with up to 5 3/4 whorls. Late whorls have coarse irregular striae and prominent raised spiral cords or lirae on both upper and lower surfaces (up to 5 above and 11 below the periphery). The umbilicus is narrow and deep (contained about 5 times in the diameter). The aperture is oval, periphery with a keel. Shell opaque and chalky, color is brownish-gray (dead shells to pearly white); Montana shells lack reddish-brown spiral bands often present in most other species of Oreohelix. Head, neck and tentacles dull ashy gray, darker than the shell.

## Habitat

Often associated with limestone talus and outcrops, sometimes with minimal tree canopy cover on steep south-facing slopes, although at least one site is north-facing. Primary canopy species include Douglas-fir, ponderosa pine, mountain maple; secondary canopy cover may include aspen, ninebark, and serviceberry. Live animals present mostly under rocks and in duff or soil accumulations under rocks, sun-bleached shells may be found on the surface.

# Pygmy Mountainsnail - Oreohelix pygmaea

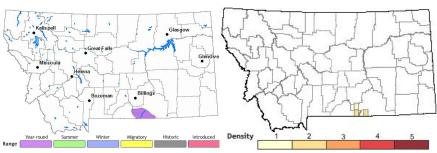
http://FieldGuide.mt.gov/detail\_IMGASB5300.aspx



## **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 5

## **General Description**

The shell is small to medium, to about 15 mm diameter but usually less than 12 mm, and to 14 mm in height but usually less than 9 mm (ratio of height to diameter 0.67 – 0.81); heliciform with up to 5 1/2 whorls, high-spired in profile, umbilicus narrow and deep, aperture oval, periphery rounded. Shell opaque and chalky, color is brown to fleshy, sometimes chocolate brown on the base (dead sun-bleached shells whitish), with a series of reddish-brown spiral bands, two on the upper surface, a prominent band near the periphery on the lower surface, up to four thinner bands (sometimes none) on the lower surface. Smaller shells may have a brownish cuticle that is lost in larger individuals. Surface is irregularly wrinkled with weak to moderate spiral impressed lines. Suture is deeply impressed on the last whorl. In the field, best identified based upon a combination of size, narrow umbilicus, location and habitat.

## Habitat

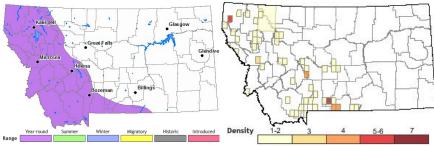
Limestone and sandstone talus, adjacent moist meadows and creek bottoms. Tree canopy species where present include scattered cottonwood, aspen, willow, Douglas-fir, ponderosa pine, juniper and mountain mahogany. Live animals present mostly under rocks and in duff or soil accumulations under rocks, sun-bleached shells may be found on the surface.

# Rocky Mountainsnail - Oreohelix strigosa http://FieldGuide.mt.gov/detail\_IMGASB5320.aspx



Global Rank: G5Q State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 75$ 

# Berry's Mountainsnail - Oreohelix strigosa berryi

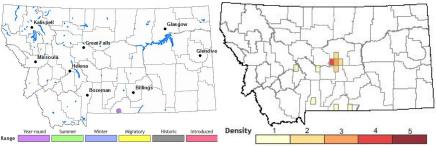
http://FieldGuide.mt.gov/detail\_IMGASB5328.aspx



## **Species of Concern**

Global Rank: G5T2 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 18

## **General Description**

See Pilsbry (1939) for complete description. Frest and Johannes (1993) offer minor revisions to original description.

#### Habitat

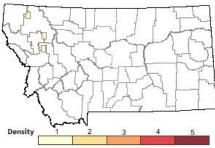
Found among small loose rock, shrubbery, and under creeping juniper (Juniperus horizontalis) on west-facing canyon slopes at the type locality in the Big Snowy Mountains, and under sticks and logs in moister locations in the same mountain range (Berry 1916). This snail was present in the Mammoth area of Yellowstone National Park on a north exposure of limey soil with plenty of cover, but neither very wet nor dry (Henderson 1936). Substrate typically is derived from limestone (Frest and Johannes 1993, 1995). In the Black Hills and Bear Lodge Mountains of Wyoming and South Dakota, it occurs in mixed and open ponderosa pine (Pinus ponderosa) forests with relatively thin litter, often with aspen (Populus tremuloides) and birch (Betula) in the canopy, and violets (Viola) and Canada dogwood (Cornus canadensis) in the understory (Frest and Johannes 1993); the deciduous tree component was relatively important for the occurrence of this subspecies.

# **Depressed Rocky Mountainsnail - Oreohelix strigosa depressa** <a href="http://FieldGuide.mt.gov/detail\_IMGASB5325.aspx">http://FieldGuide.mt.gov/detail\_IMGASB5325.aspx</a>



Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



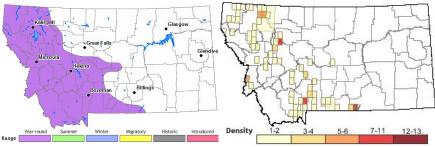
Number of Observations: 3

# **Subalpine Mountainsnail -** *Oreohelix subrudis* <a href="http://FieldGuide.mt.gov/detail\_IMGASB5330.aspx">http://FieldGuide.mt.gov/detail\_IMGASB5330.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



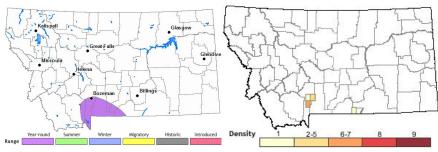
Number of Observations : 157

# Yavapai Mountainsnail - *Oreohelix yavapai* <a href="http://FieldGuide.mt.gov/detail\_IMGASB5390.aspx">http://FieldGuide.mt.gov/detail\_IMGASB5390.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 14

## Gallatin Mountainsnail - Oreohelix yavapai mariae

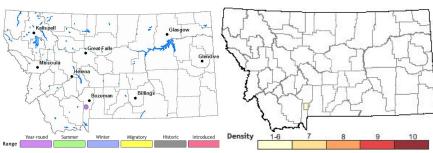
http://FieldGuide.mt.gov/detail\_IMGASB5393.aspx



#### **Species of Concern**

Global Rank: G5T1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 6

## **General Description**

Bartsch (1916) describes the shell as "decidedly depressed helicoid, almost lenticular, flesh colored, with a narrow brown band on the upper surface, which is a little nearer the peripheral cord than the suture, and a second even narrower one bordering the peripheral cord on the lower surface. Nuclear whorls scarcely differentiated from succeeding turns, bearing the same sculpture as the adult whorls, but a little less strongly expressed. Periphery of the whorls provided with a cord-like keel, which becomes somewhat weakened on the last quarter of the last turn. Entire surface both above and below marked by slender thread-like incremental lines and fine spiral striations; last whorl slightly descending near the aperture. Base broadly, openly umbilicated, well rounded; a little more convex at the umbilical wall than at the lateral margin. Aperture very oblique, oval; peristome neither thickened nor reflected at the edge; parietal wall strong, rendering the peristome complete" (p. 331). Shell diameter 20.7 mm (18.3-22.5 mm; n = 9); shell height 9.2 mm (8.2-10.0 mm; n = 9); number of whorls 5.5 (5.2-5.6; n = 9). Internal anatomy not described.

Taxanomic Comment: The original description of this taxon by Bartsch (1916) and his placement as a subspecies of *Oreohelix yavapai* are still valid. Pilsbry (1939) noted the

Taxanomic Comment: The original description of this taxon by Bartsch (1916) and his placement as a subspecies of *Oreohelix yavapai* are still valid. Pilsbry (1939) noted th larger size of this form, but thought separation of this subspecies may prove difficult or impracticable. Frest and Johannes (1995) consider this taxon distinct from another subspecies, *O. yavapai extremitatis*, that is present in the Big Horn Mountains, Wyoming, and the nearby Bridger Range, Montana, noting the consistent larger size of *O. y. mariae*, more evident pigmented banding, less extreme carination and a less-deflected aperture. Pilsbry (1939) placed all *Oreohelix* in the Xanthonycidae.

#### Habitat

Present on a south-facing slope in grassy habitat near the base of a limestone outcrop (L. Fairbanks personal communication). Nothing else about the habitat associations of this species is known or described (Hendricks 2003).

# A Tabanomorph Fly - *Oreoleptis torrenticola* <a href="http://FieldGuide.mt.gov/detail\_IIDIP0J010.aspx">http://FieldGuide.mt.gov/detail\_IIDIP0J010.aspx</a>



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Millipede - *Orinisobates expressus* http://FieldGuide.mt.gov/detail\_ITUNI24020.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Millipede - *Orinisobates utus* http://FieldGuide.mt.gov/detail\_ITUNI24030.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

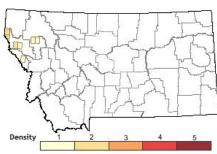
Number of Observations: 0

# A Millipede - Orophe cabinetus http://FieldGuide.mt.gov/detail\_ITUNI94010.aspx



## **Species of Concern**

Global Rank: G1G3 State Rank: S1S3



Number of Observations: 10

# A Millipede - Orophe unicus http://FieldGuide.mt.gov/detail\_ITUNI94020.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

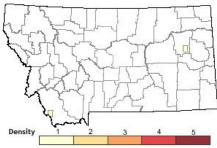
 $\textbf{Number of Observations} \colon 0$ 

### An Orthocladius Chironomid - Orthocladius annectens

http://FieldGuide.mt.gov/detail\_IIDIP0Q020.aspx



Global Rank: GNR State Rank: S5



Number of Observations: 2

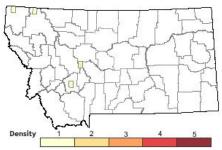
### An Orthocladius Chironomid - Orthocladius lignicola

http://FieldGuide.mt.gov/detail\_IIDIP0Q010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

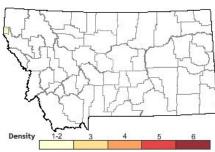


# A Millipede - Orthogmus oculatus http://FieldGuide.mt.gov/detail\_ITUNI92010.aspx



### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3

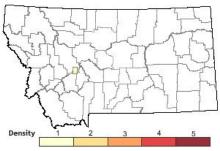


Number of Observations: 2

### **Transparent Quaker Moth - Orthosia transparens**

http://FieldGuide.mt.gov/detail\_IILEYJM030.aspx





Number of Observations: 1

### **General Description**

The Transparent Quaker Moth (Orthosia transparens) wingspan is about 37 mm. The forewing is falcate, light red to dark red-brown with a black reniform spot. The hindwing is dark gray to black. The males have filiform antennae (USGS 2006).

Global Rank: GNR State Rank: SNR

### A Bark Beetle - Orthotomicus caelatus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOL7B010.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### A Caddisfly - Orthotrichia cristata

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI45080.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

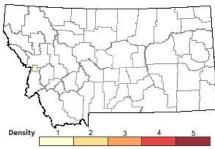
# Garlic Glass-snail - Oxychilus alliarius http://FieldGuide.mt.gov/detail\_IMGAS77010.aspx



**Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

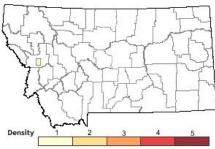


# **Dark-bodied Glass-snail - Oxychilus draparnaudi** <a href="http://FieldGuide.mt.gov/detail\_IMGAS77030.aspx">http://FieldGuide.mt.gov/detail\_IMGAS77030.aspx</a>



#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA



Number of Observations: 1

### A Caddisfly - Oxyethira aeola

http://FieldGuide.mt.gov/detail\_IITRI63930.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

labitat

### An Oxyethiran Microcaddisfly - Oxyethira coercens

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI42040.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### Habitat

### A Caddisfly - Oxyethira dualis

http://FieldGuide.mt.gov/detail\_IITRI42120.aspx



Global Rank: G5 State Rank: SNR

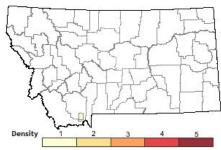
AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

# Marshall Ambersnail - Oxyloma decampi http://FieldGuide.mt.gov/detail\_IMGAS67010.aspx



Global Rank: G5Q State Rank: SNR

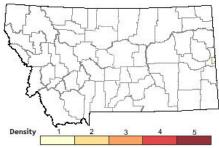


Number of Observations: 1

# An Ambersnail - Oxyloma gouldi http://FieldGuide.mt.gov/detail\_IMGAS67190.aspx



Global Rank: G5 State Rank: SNR



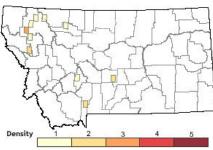
Number of Observations: 1

# Niobrara Ambersnail - *Oxyloma haydeni* <a href="http://FieldGuide.mt.gov/detail\_IMGAS67150.aspx">http://FieldGuide.mt.gov/detail\_IMGAS67150.aspx</a>



Global Rank: G3 State Rank: SNR

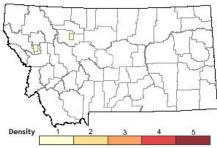
AGENCY STATUS USFWS: USFS: BLM:



# Ninepipes Ambersnail - *Oxyloma missoula* http://FieldGuide.mt.gov/detail\_IMGAS67070.aspx



Global Rank: G2G4 State Rank: SNR



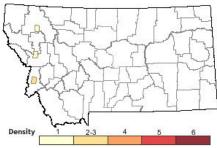
Number of Observations: 2

# Oblique Ambersnail - *Oxyloma nuttallianum* <a href="http://FieldGuide.mt.gov/detail\_IMGAS67080.aspx">http://FieldGuide.mt.gov/detail\_IMGAS67080.aspx</a>



Global Rank: G2G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

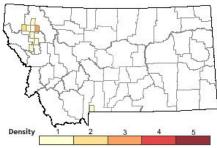


# Blunt Ambersnail - Oxyloma retusum http://FieldGuide.mt.gov/detail\_IMGAS67090.aspx



Global Rank: G5 State Rank: SNR

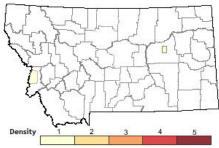
AGENCY STATUS USFWS: USFS: BLM:



# **Big Poplar Sphinx Moth -** *Pachysphinx modesta* <a href="http://FieldGuide.mt.gov/detail\_IILEX0J010.aspx">http://FieldGuide.mt.gov/detail\_IILEX0J010.aspx</a>



Global Rank: G4G5 State Rank: SNR



Number of Observations: 2

### Pilose Crayfish - Pacifastacus gambelii

http://FieldGuide.mt.gov/detail\_ICMAL31030.aspx



State Rank: SX

AGENCY STATUS
USFWS:
USFS:
BLM:

Global Rank: G4G5



 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

Pigmented, eyes normal; rostrum with margins converging, at least 3 pr lateral marginal spines, acumen indistinct, median carina present; postorbital ridges lacking posterior spines or tubercles; cervical and hepatic spines absent; areola broad with 7-9 punctations in narrowest part, branchiocardiac groove interrupted so that distinct cephalic and caudal portions of areola evident; chela stout, dorsal surface of palm studded with minute tubercles, two conspicuous longitudinal clusters of setae on dorsal surface of palm; male lacking hooks and bosses on all pereiopods; male 1st pleopod lacking terminal elements, in form of tightly rolled tube, only distalmost 3-5% slightly attenuate; incisor region of mandible blade-like (Hobbs, 1972; Bouchard 1977). [LENGTH: to 35 TCL, to 65 TL] [WIDTH: to 13]

#### Habitat

This species is found in lentic & lotic habitats and is likely to breed during late-spring. This species is believed to be an opportunistic feeder and has a home range estimated to be no more than 50 meters (Wyoming Game and Fish Department 2002). The pilose crayfish is believed to be intollerable of warmer waters or of the warmer water fish populations (Johnson 1986).

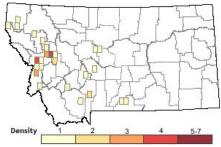
### Signal Crayfish - Pacifastacus Ieniusculus

http://FieldGuide.mt.gov/detail\_ICMAL31040.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 41

#### **General Description**

The signal crayfish, Pacifastacus leniusculus, is an large North American crayfish indigenous to the western United States. Members of this species are up to 15 cm in length. They are bluish-brown to reddish-brown in color with robust large smooth claws. They have a white to pale blue-green patch near the claw hinge (see photo). Like all crayfish, they are solitary and omnivorous, although their diet is mainly vegetarian they will eat anything from decaying roots and leaves to meat, including crayfish smaller than themselves.

#### Habitat

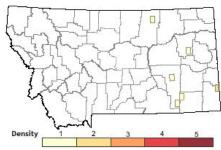
This crayfish prefers large cobbles or woody debris to hide under, and if softer sediment banks are available will create burrows. It is found in streams to large rivers and is even larger and more abundant in reserviors and lakes along the mainstem Clark Fork river.

### A Water Boatman - Palmacorixa buenoi

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIHEMAB010.aspx}}$ 



Global Rank: GNR State Rank: SNR

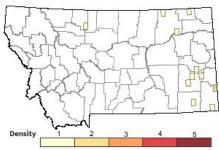


Number of Observations: 7

# A Water Boatman - Palmacorixa gillettei <a href="http://FieldGuide.mt.gov/detail\_IIHEMAB020.aspx">http://FieldGuide.mt.gov/detail\_IIHEMAB020.aspx</a>



Global Rank: GNR State Rank: SNR



Number of Observations: 13

### Wandering Glider - Pantala flavescens

http://FieldGuide.mt.gov/detail\_IIODO55010.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

The habitat of the Wandering Glider includes a wide variety of temporary pools, ponds, puddles, other wetlands, as well as ditches, artificial wetlands, garden ponds and even swimming pools. Fishless environments are the usual (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

# A Borer Moth - *Papaipema verona* <a href="http://FieldGuide.mt.gov/detail\_IILEYC0130.aspx">http://FieldGuide.mt.gov/detail\_IILEYC0130.aspx</a>



Global Rank: G4Q State Rank: SNR

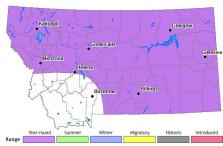
AGENCY STATUS USFWS: USFS: BLM:

# Canadian Tiger Swallowtail - Papilio canadensis <a href="http://FieldGuide.mt.gov/detail\_IILEP94250.aspx">http://FieldGuide.mt.gov/detail\_IILEP94250.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



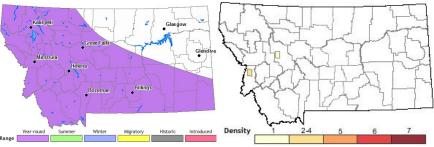
### Pale Swallowtail - Papilio eurymedon

http://FieldGuide.mt.gov/detail\_IILEP94210.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS:

BLM:



#### $\textbf{Number of Observations} \colon 5$

#### **General Description**

The Pale Swallowtail is the only black-and-white swallowtail in the west. The upper surface of the wings is a creamy white, and not yellow. The upper surface has black stripes with a thick wing-border. The forewing is very pointed. The tail of the hindwing is long and twisted. The wingspan is about 64 - 90 mm (Opler et al. 2010).

Pale Swallowtail larvae are similar to Western Tiger Swallowtail (P. rutulus) larvae, except that the black "pupil" in the eye spot is smaller than on the Western Tiger Swallowtail, and the yellow spot is not divided into two spots above the eye spot, just notched at the side (Allen et al. 2005).

#### Habitat .

Foothills, open woodlands, chaparral, streamsides, but not high mountains (Opler et al. 2010).

# **Eastern Tiger Swallowtail - Papilio glaucus** <a href="http://FieldGuide.mt.gov/detail\_IILEP94180.aspx">http://FieldGuide.mt.gov/detail\_IILEP94180.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

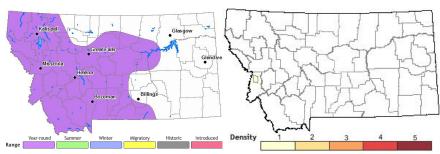
# Indra Swallowtail - Papilio indra http://FieldGuide.mt.gov/detail\_IILEP94100.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

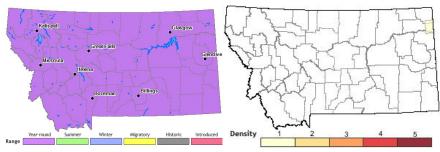
Mountains, desert mountains, and canyons (Opler et al 2010).

# Old World Swallowtail - Papilio machaon http://FieldGuide.mt.gov/detail\_IILEP94080.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



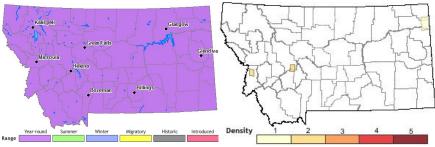
### Two-tailed Swallowtail - Papilio multicaudata

http://FieldGuide.mt.gov/detail\_IILEP94200.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 6

#### **General Description**

The upper surface of the male Two-tailed Swallowtail (*Papilio multicaudata*) forewing has narrow black stripes. Each hindwing has 2 tails. The wing span is about 90 - 127 mm (Opler et al. 2010).

### Habitat .

Foothill slopes and canyons, moist valleys, streamsides, woodlands, parks, roadsides, suburbs, and cities (Opler et al. 2010).

# Black Swallowtail - Papilio polyxenes http://FieldGuide.mt.gov/detail\_IILEP94010.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



# Western Tiger Swallowtail - Papilio rutulus http://FieldGuide.mt.gov/detail\_IILEP94190.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:

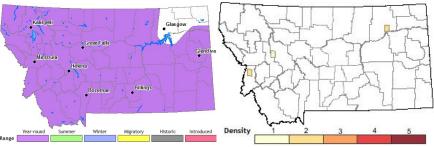


### Anise Swallowtail - Papilio zelicaon

http://FieldGuide.mt.gov/detail\_IILEP94090.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 5

#### **General Description**

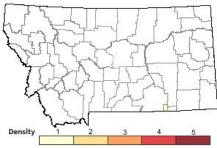
The upper surface of the Anise Swallowtail (*Papilio zelicaon*) hindwing has a yellow-orange eyespot near tail with a round black center that is not connected to hindwing margin. The anal cell of the hindwing is primarily yellow. The wing span is about 70 - 90 mm (Opler et al. 2010).

Bare hills, mountains, gardens, fields, vacant lots, and roadsides (Opler et al. 2010).

# A Small Minnow Mayfly - Paracloeodes minutus http://FieldGuide.mt.gov/detail\_IIEPH22010.aspx



Global Rank: G5 State Rank: SNR



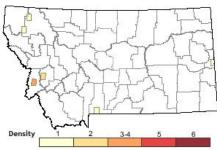
Number of Observations: 1

# Pinhead Spot - Paralaoma caputspinulae <a href="http://FieldGuide.mt.gov/detail\_IMGAS47030.aspx">http://FieldGuide.mt.gov/detail\_IMGAS47030.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



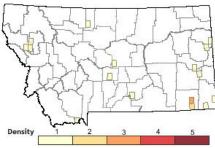
### A Paralauterborniellan Chironomid - Paralauterborniella nigrohalterale

http://FieldGuide.mt.gov/detail\_IIDIP0P010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Paraleptophlebia bicornuta http://FieldGuide.mt.gov/detail\_IIEPH33160.aspx



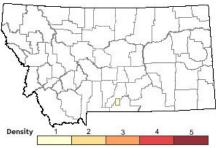


Number of Observations: 37

Global Rank: G5 State Rank: SNR

# A Mayfly - Paraleptophlebia debilis http://FieldGuide.mt.gov/detail\_IIEPH33060.aspx





Number of Observations:  ${\bf 1}$ 

Global Rank: G5 State Rank: SNR

# A Mayfly - Paraleptophlebia heteronea <a href="http://FieldGuide.mt.gov/detail\_IIEPH33250.aspx">http://FieldGuide.mt.gov/detail\_IIEPH33250.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# **Bullshorn Needlefly - Paraleuctra forcipata**

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIPLE0D030.aspx}}$ 



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**

# Slender Needlefly - Paraleuctra jewetti

http://FieldGuide.mt.gov/detail\_IIPLE0D040.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**

# Western Needlefly - Paraleuctra occidentalis

http://FieldGuide.mt.gov/detail\_IIPLE0D050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

## Spruce Needlefly - Paraleuctra projecta

http://FieldGuide.mt.gov/detail\_IIPLE0D070.aspx



**General Description** 

Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

## Summit Needlefly - Paraleuctra vershina

http://FieldGuide.mt.gov/detail\_IIPLE0D090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

## A Mayfly - Parameletus columbiae

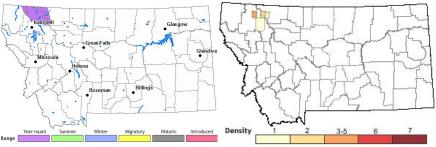
http://FieldGuide.mt.gov/detail\_IIEPH32040.aspx



#### **Species of Concern**

Global Rank: G2 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 9

#### **General Description**

This is a large, swimming, wetland and slow current mayfly with a minnow-like body and large gills along the abdomen. These could be predaceous mayflies given the modified structures of the labial palps (almost raptorial). They hatch during early spring (snow -melt) from dormant eggs laid the previous spring, and have a brief, rapid growing nymphal period until adults hatch in late-spring early summer (Edmunds 1957).

#### Habitat

Larvae are found in temporary ponds and fringe wetlands on the edges of lakes in association with heavy growth of broad-leaved sedges (Carex spp.). The habitat and biology of this species has been well documented (Edmunds 1957). Ironically, the species appears to be extirpated in the high-mountain, Carex-wetland area of Utah where the species was studied in detail. Records from the 1960s exist for Idaho but intensive surveys recently found no specimens, and older historical records exist for British Columbia and Wyoming. The current global ranking appears warranted at this time. In Washington, it potentially could occur in Stevens Co. in Chamokane Creek because it is known from adjacent British Columbia (Meyer and McCafferty 2007). The larvae are often concentrated where a slight current exists (Edmunds 1957). In addition to lakes and ponds, this species occurs at the slack-water edges of moderately flowing rivers and streams (Jensen 1966).

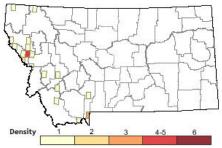
## Hyporheic Sallfly - Paraperla frontalis

http://FieldGuide.mt.gov/detail\_IIPLE1C010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 25

#### **General Description**

Nymphs and adults within the Chloroperliidae are small green and yellow stoneflies. Known to fly-fisherman as "little yellows", "little greens" and "Yellow Sallies". This family is well represented in Montana with 26 species, one of the larger families in the order Plecoptera, containing some 100 species distributed throughout the Holarctic region of North America. The adults are emerging in late spring and throughout summer.

# Chilliwack Sallfly - Paraperla wilsoni

http://FieldGuide.mt.gov/detail\_IIPLE1C020.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**

Nymphs and adults within the Chloroperliidae are small green and yellow stoneflies. Known to fly-fisherman as "little yellows", "little greens" and "Yellow Sallies". This family is well represented in Montana with 26 species, one of the larger families in the order Plecoptera, containing some 100 species distributed throughout the Holarctic region of North America. The adults are emerging in late spring and throughout summer.

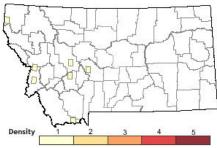
## A Caddisfly - Parapsyche almota

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI63640.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 8

Instream habitat: Hydropsychid larval populations can be very abundant in many Montana river aquatic communities. Larvae are restricted to moderate or fast flowing waters (very cold: Parapsyche--warmwater: Cheumatopsyche), living on cobbles/rocks, boulders or submerged logs

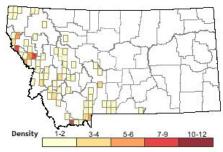
# A Caddisfly - Parapsyche elsis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI63650.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

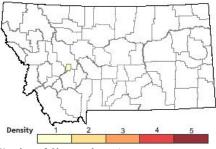


 $\textbf{Number of Observations} \colon 171$ 

Instream habitat: Hydropsychid larval populations can be very abundant in many Montana river aquatic communities. Larvae are restricted to moderate or fast flowing waters (very cold: Parapsyche--warmwater: Cheumatopsyche), living on cobbles/rocks, boulders or submerged logs

# Small Tigermoth - *Parasemia plantaginis* <a href="http://FieldGuide.mt.gov/detail\_IILEY26010.aspx">http://FieldGuide.mt.gov/detail\_IILEY26010.aspx</a>





 ${\bf Number\ of\ Observations}\colon 1$ 

## **General Description**.

This species is diurnal and is not attracted to light.

Global Rank: G5 State Rank: SNR

# Clodius Parnassian - Parnassius clodius http://FieldGuide.mt.gov/detail\_IILEP90020.aspx



Global Rank: G5 State Rank: S3S4

AGENCY STATUS USFWS: USFS: BLM:

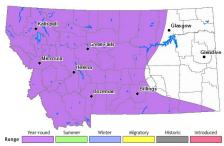


# Rocky Mountain Parnassian - Parnassius smintheus <a href="http://FieldGuide.mt.gov/detail\_IILEP90050.aspx">http://FieldGuide.mt.gov/detail\_IILEP90050.aspx</a>



Global Rank: G5 State Rank: S5

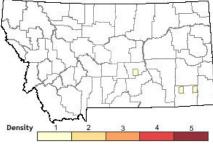
AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

# Northern Scorpion - Paruroctonus boreus <a href="http://FieldGuide.mt.gov/detail\_ILARA64020.aspx">http://FieldGuide.mt.gov/detail\_ILARA64020.aspx</a>



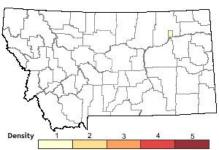


Number of Observations: 3

Global Rank: GNR State Rank: SNR

# Two-spotted Stinkbug - Perillus bioculatus <a href="http://FieldGuide.mt.gov/detail\_IIHEM24010.aspx">http://FieldGuide.mt.gov/detail\_IIHEM24010.aspx</a>





 $\ \, \textbf{Number of Observations} \colon 1 \\$ 

Global Rank: G5 State Rank: SNR

## Freckled Stone - Perlesta placida

http://FieldGuide.mt.gov/detail\_IIPLE1U120.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

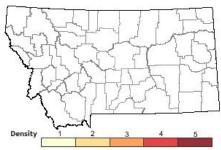
#### **General Description**.

This species of the family Perlidae is a predaceous stonefly, eating other aquatic insects-especially midges, blackflies and small mayflies. They live on the cobbles and boulders of medium to fast flowing streams.

# **Longgill Springfly -** *Perlinodes aurea* <a href="http://FieldGuide.mt.gov/detail\_IIPLE29010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE29010.aspx</a>



Global Rank: G4 State Rank: SNR



Number of Observations: 1

## Utah Needlefly - Perlomyia utahensis

http://FieldGuide.mt.gov/detail\_IIPLE0E020.aspx



Number of Observations: 0

### **General Description**

This is a small black stonefly in the family; Leuctridae. Like most of the species in the rolled-winged family, this species hatches early in the year often when snow is still on the ground, where they can be noticed quite easily crawling around along the banks of streams.

#### Habitat

Ecology: This species inhabits creeks and small rivers but is most common in springs (Baumann, Gaufin, and Surdick 1977).

Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

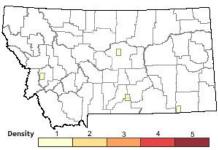
## A Caddisfly - Philarctus quaeris

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRIMT002.aspx}}$ 



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 4

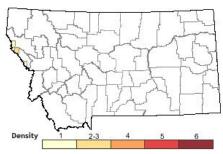
#### **General Description**

This caddisfly incorporates snails and other shells into its case from its surroundings making for a neat decorative case. In Montana, this species is generally found in lentic habitats (ponds, wetlands, lake) or on the depositional margins of streams and rivers in aquatic vegetation or on the bottom.

# A Caddisfly - *Philocasca banksi* <a href="http://FieldGuide.mt.gov/detail\_IITRI18040.aspx">http://FieldGuide.mt.gov/detail\_IITRI18040.aspx</a>



Global Rank: G1G3 State Rank: SNR



Number of Observations: 6

## A Bark Beetle - Phloeosinus hoferi

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLJG040.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - Phloeosinus pini

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLJG050.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - Phloeosinus punctatus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLJG060.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - Phloeotribus lecontei

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOL7D040.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Cloudless Sulphur - *Phoebis sennae* <a href="http://FieldGuide.mt.gov/detail\_IILEPB1010.aspx">http://FieldGuide.mt.gov/detail\_IILEPB1010.aspx</a>



Global Rank: G5 State Rank: SNA

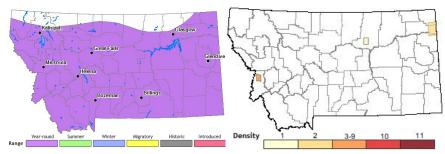
AGENCY STATUS USFWS: USFS: BLM:

# Common Sootywing - Pholisora catullus http://FieldGuide.mt.gov/detail\_IILEP41010.aspx



Global Rank: G5 State Rank: S5

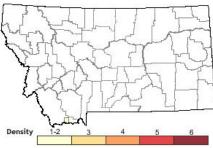
AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Phryganea cinerea http://FieldGuide.mt.gov/detail\_IITRI31020.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 2

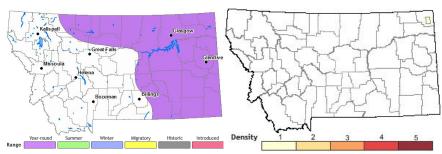
# Tawny Crescent - *Phyciodes batesii* <a href="http://FieldGuide.mt.gov/detail\_IILEPK3040.aspx">http://FieldGuide.mt.gov/detail\_IILEPK3040.aspx</a>



### **Potential Species of Concern**

Global Rank: G4 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



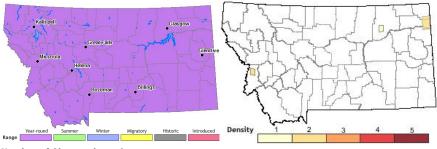
 ${\bf Number\ of\ Observations}\colon 1$ 

Moist meadows and pastures in the northern part of its range; dry rocky ridges or hillsides in the south (Opler and Warren 2002).

# Northern Crescent - *Phyciodes cocyta* <a href="http://FieldGuide.mt.gov/detail\_IILEPK3100.aspx">http://FieldGuide.mt.gov/detail\_IILEPK3100.aspx</a>



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



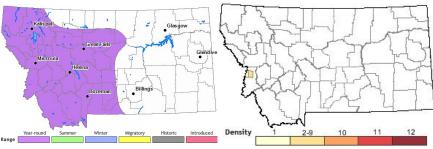
 $\textbf{Number of Observations} \colon 6$ 

# Mylitta Crescent - *Phyciodes mylitta* <a href="http://FieldGuide.mt.gov/detail\_IILEPK3090.aspx">http://FieldGuide.mt.gov/detail\_IILEPK3090.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 10$ 

### **General Description**.

Small (16-17 mm FW [forewing] length), FW angled, dark and mottled on uhw [underhindwing] (Scott, 1986).

# Pale Crescent - Phyciodes pallida http://FieldGuide.mt.gov/detail\_IILEPK3080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



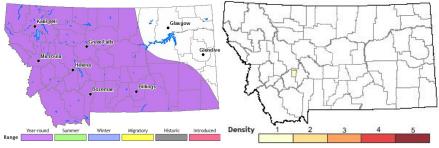
## Field Crescent - Phyciodes pulchella

http://FieldGuide.mt.gov/detail\_IILEPK3050.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

#### **General Description**

The upperside of the Field Crescent (*Phyciodes pulchella*) is orange and black. The underside of forewing is yellow-brown with a yellow bar at the cell and small black patches on the inner margin. The underside of hindwing is yellow-brown with rusty markings. The wing span is 25 - 45 mm (Opler et al. 2010).

#### Habitat

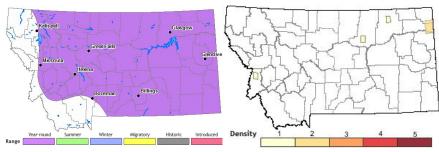
Flats and open areas, fields, meadows, and streamsides from plains to mountains (Opler et al. 2010).

# Pearl Crescent - Phyciodes tharos http://FieldGuide.mt.gov/detail\_IILEPK3030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

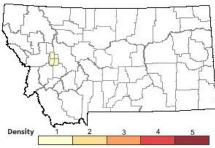


# Obtuse Physa - *Physa jennessi* <a href="http://FieldGuide.mt.gov/detail\_IMGASL9010.aspx">http://FieldGuide.mt.gov/detail\_IMGASL9010.aspx</a>



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 3

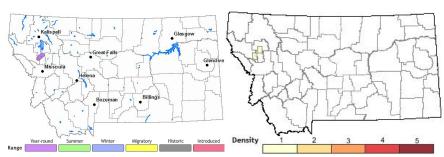
## Large-mantle Physa - *Physa megalochlamys* http://FieldGuide.mt.gov/detail\_IMGASL9060.aspx



## **Species of Concern**

Global Rank: G3G4 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

## **General Description**

See Taylor (1988) for full description.

See global comments. PHYSA MEGLOCHLAMYS is typically found in marshes or ponds such as a lily pond in the case of the type species(Frest and Johannes, 1995; Taylor, 1988). The preferred substrate is characteristically a fine mud type (Frest and Johannes 1995).

# Glass Physa - *Physa skinneri* http://FieldGuide.mt.gov/detail\_IMGASL9020.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

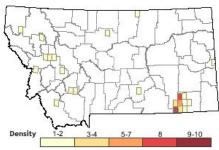
AGENCY STATUS USFWS: USFS: BLM:

# Pewter Physa - *Physella acuta* http://FieldGuide.mt.gov/detail\_IMGASL9120.aspx



Global Rank: G5Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# Rotund Physa - *Physella columbiana* <a href="http://FieldGuide.mt.gov/detail\_IMGASM0060.aspx">http://FieldGuide.mt.gov/detail\_IMGASM0060.aspx</a>



Global Rank: G2 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Tadpole Physa - Physella gyrina

http://FieldGuide.mt.gov/detail\_IMGASL9130.aspx





Number of Observations: 77

## **General Description**

This ubiquitous, left-handed snail species is distributed in temerpate and sub-Arctic North America from southern Alaska and northwestern Canada (but not in the extreme north) east and southeast to central Labrador, western New England and the vicinity of New York City; south to central California, Nevada, Utah, and Colorado(Taylor, 2003). Burch (1989) lists several supposed synonyms including Physella gyrina gyrina from Canada, Quebec to Ontario south to Nebraska and east to New York. This snail can be found in a variety of habitats from lakes, ponds, streams, ditches, and marshes (Taylor, 2003). Like most snails, these are herbivorous-scrapers of algae, detritus and diatoms from vegetation and off other benthic substrates.

P. gyrina tends to live in clear to turbid waters in the marginal zones of large lakes, ponds and rivers and can be found in the shallow margins or in marshy pools along shorelines

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

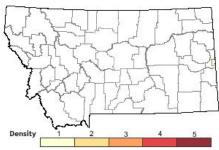
BLM:

# Twisted Physa - Physella lordi http://FieldGuide.mt.gov/detail\_IMGASM0190.aspx



Global Rank: G5Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# Rocky Mountain Physa - *Physella propinqua* <a href="http://FieldGuide.mt.gov/detail\_IMGASM0230.aspx">http://FieldGuide.mt.gov/detail\_IMGASM0230.aspx</a>



Global Rank: G5Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Banded Physa - *Physella vinosa* http://FieldGuide.mt.gov/detail\_IMGASM0290.aspx



Global Rank: G5Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# Protean Physa - *Physella virgata* <a href="http://FieldGuide.mt.gov/detail\_IMGASM0300.aspx">http://FieldGuide.mt.gov/detail\_IMGASM0300.aspx</a>



Global Rank: G5Q State Rank: SNR

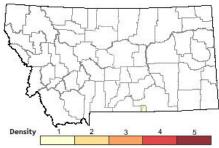
AGENCY STATUS USFWS: USFS: BLM:

# Wet-rock Physa - *Physella zionis* http://FieldGuide.mt.gov/detail\_IMGASM0320.aspx



Global Rank: G1 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

## Autumn Springfly - Pictetiella expansa

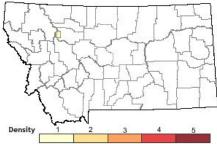
http://FieldGuide.mt.gov/detail\_IIPLE2H010.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## ${\bf Number\ of\ Observations}\colon 1$

## **General Description**

This stonefly is found in the high-quality, small, rocky, higher elevation Pristine Mountain Aquatic Ecological System. The nymph's general color is brown, but can be quite strikingly patterned. Head pattern is light on a dark background that has short sub-mental gills, but no thoracic gills. The cerci of the nymphs are distinctly black-tipped, a character that could only be confused with the genus Perlinoides (Baumann et al. 1977). The adults emerge from July through October across the species' range.

#### Habitat

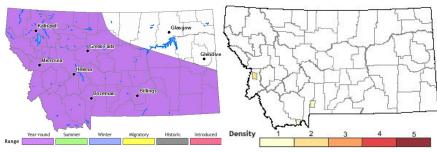
Nymphs generally occur in small, fast-moving streams and require high water quality. Individuals have been encountered at elevations between 555-1255 m in north Idaho (Idaho Department of Environmental Quality Beneficial Use Reconnaissance Program Database). This species occurs in creeks and small streams (Baumann et al. 1977; NatureServe 2006). The trophic relationship of P. expansa is likely a predator (mainly on Chironmidae and Simulidae) as are most other Perlodidae in this sub-family (Merritt and Cummins 1996).

# Margined White - *Pieris marginalis* http://FieldGuide.mt.gov/detail\_IILEPA2050.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



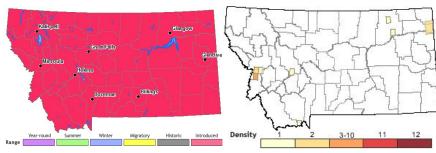
# Cabbage White - *Pieris rapae* http://FieldGuide.mt.gov/detail\_IILEPA2030.aspx



## **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA





 $\textbf{Number of Observations} \colon 20$ 

## Adam Peaclam - Pisidium adamsi

http://FieldGuide.mt.gov/detail\_IMBIV51010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat \_

Although the species has a wide range of adaptability, it apparently prefers quiet water in rivers, lakes, and ponds, often among muck and decaying vegetable matter.

Observations indicate it is found in quiet water at a depth of 0.3 to 15.5 m, with a pH of 6.05-7.7, and fixed carbon dioxide levels of 2.75-18.36 ppm. Although it seems to prefer muddy bottoms it has also been found in mud and marly-clay bottoms and among pebbles (La Rocque 1967:316). Clarke (1981:392) indicates it lives in ponds, lakes, rivers, and streams of at least 8 m in width, and is usually found in mud.

## A Peaclam - Pisidium arbortivum

http://FieldGuide.mt.gov/detail\_IMBIV51270.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Ubiquitous Peaclam - Pisidium casertanum

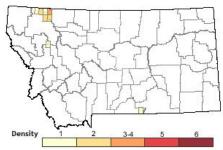
http://FieldGuide.mt.gov/detail\_IMBIV51030.aspx



Global Rank: G5 State Rank: SNR

**AGENCY STATUS** 

USFWS: USFS: BLM:



Number of Observations: 14

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat

The species is adapted to a wide variety of habitats and considered to be the most common PISIDIUM. It is found in all aquatic environments including "bog ponds, ponds, and swamps that dry up for several months each year" and temporary streams or seepages. It can be found wherever any other PISIDIUM is found, except in deep water. The species exhibits a variation in shell characteristics which corresponds to the environment in which is it found. "Shells with thin walls and smooth outlines come from ponds, swamps, lagoons, bog ponds, and small lakes that are filling up with marl. The heavier shelled, typical CASERTANUM lives in rivers or fairly large creeks." It has been collected in sand, mud, and clay bottoms at depths ranging from 0.5-3.0 m, with pH levels of 5.8-7.95, and fixed carbon dioxide levels of 5.5-30.56 ppm (La Rocque 1967:342). Clarke (1981:394) indicates the species is found in ponds, lakes, small streams, rivers, ditches, swamps, and in temporary-water habitats.

## Ridged-beak Peaclam - Pisidium compressum

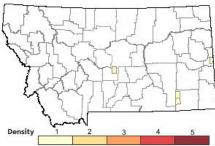
http://FieldGuide.mt.gov/detail\_IMBIV51040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS

USFWS: USFS: BLM:



## Number of Observations: 4

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat

This is the second most common PISIDIUM in North America (after P. CASERTANUM). One source indicates the species is found "in lakes, rivers, and creeks; never in ponds, swamps, lagoons, or bog ponds" (Herrington and Taylor 1958:15, cited in La Rocque 1967:331), while another source states that the species prefers streams but is occasionally found in ponds (Leonard 1950:40-41, cited in La Rocque 1967:331). The species presence in lakes and ponds may be explained by being "washed in from streams emptying into the lake." It has been recorded in sandy bottoms with vegetation, and in mud and clay bottoms; in shallow water and at depths up to 20 m; with pH levels of 7.0-8.37; and fixed carbon dioxide levels of 9.3-30.56 ppm (La Rocque 1967:331). Clarke (1981:396) indicates the species occurs in permanent ponds, lakes, rivers, and streams; it is found on a variety of substrates. It is usually found in shallow water among vegetation.

## Alpine Peaclam - Pisidium conventus

http://FieldGuide.mt.gov/detail\_IMBIV51050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## Number of Observations: 0

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat .

The species is not found in warm water. At northern latitudes it can be collected along the shoreline, however farther south it will only be found in deep water or at high altitudes. The habitat of this species is well known in Europe where it is found in alpine lakes "in the sublittoral and deep parts, where it lives from 5-8 m to 70 m and more in depth (exceptionally down to 300 m)." (La Rocque 1967:326). Clarke (1981:424) indicates this cold water species is found at all depths in the arctic and subarctic regions, and at considerable depths in the temperate parts of its range.

## River Peaclam - Pisidium fallax

http://FieldGuide.mt.gov/detail\_IMBIV51090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat .

Clarke (1981:400) indicates the species is uncommon, and occurs in streams, rivers, and exposed habitats in lakes. Usually found on sand or gravel.

## Rusty Peaclam - Pisidium ferrugineum

http://FieldGuide.mt.gov/detail\_IMBIV51100.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS

USFWS: USFS: BLM:

#### Number of Observations: 0

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

#### Habitat

The species prefers cool climates and exhibits some variation in form related to the environmental conditions in which it lives. "When found on a sandy bottom the striae are prominent and the beaks more or less tubercular. Those specimens obtained from lakes that are filling up with marl or developing a mucky bottom are smoother, have a greater diameter, and the beaks do not have the tubercular appearance. The varieties are much more common than the typical form with its strange tubercular beaks." Previous records are mainly for lakes but the species is also found in creeks and rivers. Has been collected in mud, marly clay, and sand bottoms, at depths of 1 to 3 m, usually among vegetation, with pH levels of 7.23 to 8.14, and fixed carbon dioxide levels of 10.8 to 22.5 ppm (La Rocque 1967:340). Clarke (1981:402) indicates the species is found in ponds, lakes, streams and rivers, usually on a sandy or muddy bottom, and among vegetation.

## Giant Northern Peaclam - Pisidium idahoense

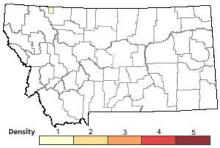
http://FieldGuide.mt.gov/detail\_IMBIV51120.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## ${\bf Number\ of\ Observations}\colon 1$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat .

The species is found most often in cold arctic and mountain lakes, but in the southern part of its range, also occurs in small relatively warm lakes. Usually found on sand among vegetation (Clarke 1981:390).

## A Peaclam - Pisidium imbecille

http://FieldGuide.mt.gov/detail\_IMBIV51280.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Tiny Peaclam - Pisidium insigne

http://FieldGuide.mt.gov/detail\_IMBIV51130.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

## Habitat \_

The species is most often found in slow-moving creeks and spring creeks (Clarke 1981:428).

## Lilljeborg Peaclam - Pisidium lilljeborgi

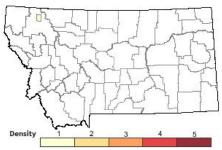
http://FieldGuide.mt.gov/detail\_IMBIV51140.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## Number of Observations: 1

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

The species prefers lakes but is also found in rivers, but not in small creeks or ponds. Has been collected in bottoms consisting of sand, mud, sand-gravel, gravel, boulders, marly clay, black mud, sand and clay, and sand and mud; at depths of 2-15 m (La Rocque 1967:350-352). Clarke (1981:406) indicates the species is common and can be found in all permanent-water habitats, especially lakes. It is found in mud, clay, sand, and gravel.

## Quadrangular Pillclam - Pisidium milium

http://FieldGuide.mt.gov/detail\_IMBIV51150.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

## Habitat .

The species is uncommon and occurs in ponds, lakes, and slow-moving streams. It is found on muddy bottoms among vegetation (Clarke 1981:408).

## Shiny Peaclam - Pisidium nitidum

http://FieldGuide.mt.gov/detail\_IMBIV51160.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams , which have not be reported in Montana yet.

## Habitat .

The species is fairly common and prefers shallow water, although has been found at depths of 20-25 m. It is found only in perennial water bodies such as lakes, large ponds, bog ponds, creeks, and rivers. Seems to prefer fairly clear waters with aquatic plants; is rare or absent in marshes. Has been collected in soft sand, clay, and mud bottoms (La Rocque 1967:334).

## A Peaclam - Pisidium obtusale

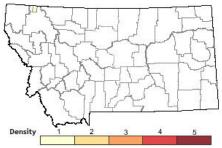
http://FieldGuide.mt.gov/detail\_IMBIV51290.aspx



Global Rank: G3G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## ${\bf Number\ of\ Observations}\colon 1$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

#### Habitat

Most collections in North America are from lakes, while data from Europe indicates the species is "lacking in lakes and rivers" and is found in stagnant waters "choked with aquatic plants." North American specimens have been collected from 1.6 to 12 m, in mud, gravel, sand and clay, and sand bottoms (La Rocque 1967:347).

## A Peaclam - Pisidium ovum

http://FieldGuide.mt.gov/detail\_IMBIV51300.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

## A Peaclam - Pisidium roperi

http://FieldGuide.mt.gov/detail\_IMBIV51310.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

## Fat Peaclam - Pisidium rotundatum

http://FieldGuide.mt.gov/detail\_IMBIV51190.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

## Habitat

The species is found in lakes, rivers, permanent ponds, and streams. It is usually found in mud among vegetation, but occurs in various other substrates as well (Clarke 1981:412).

## A Peaclam - Pisidium scutulatum

http://FieldGuide.mt.gov/detail\_IMBIV51320.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to the introduced Asian clams, which have not be reported in Montana yet.

## Short-end Peaclam - Pisidium subtruncatum

http://FieldGuide.mt.gov/detail\_IMBIV51200.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat .

Various authors indicate the species is found in streams, bays, lakes, and rivers. It is "very common in lakes, mainly in the littoral zone, but lives down to 25-30 m below the surface." One source indicates the species prefers running water, and rivers with clear water, and is rarely found in pools. It has been collected at altitudes up to 1,300 m; in mud, sand, and gravel bottoms; at depths of 0.8-5.6 m (La Rocque 1967:350). Clarke (1981:414) indicates the species is found in ponds, lakes, muskeg pools, streams, and rivers. It is found among vegetation on various types of substrates.

## Triangular Peaclam - Pisidium variabile

http://FieldGuide.mt.gov/detail\_IMBIV51230.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS:

USFWS: USFS: BLM:

#### Number of Observations: 0

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

#### Habitat .

The species is found in creeks, rivers, and lakes, "usually in still waters where soft sediments accumulate." It is frequently found burrowing in gravel, sand, clay and mud in water 1-13 feet deep, "but is more abundant in mud where the water is 4-11 feet deep." The species has been collected in sand and gravel, mud, marly clay, gravel and silt, and sand; in waters with a pH of 5.72-8.37, and fixed carbon dioxide levels of 1.72-30.56 ppm; and depths of 0.3 to 13.5 m. It may perhaps live in almost any kind of lake or river (La Rocque 1967:338). Clarke (1981:418) indicates the species is common and lives in "virtually all natural perennial-water habitats. Found in various substrates (most frequently mud) and usually amid vegetation."

## A Peaclam - Pisidium variabile magnum

http://FieldGuide.mt.gov/detail\_IMBIV51231.aspx



Global Rank: G5TNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Globular Peaclam - Pisidium ventricosum

http://FieldGuide.mt.gov/detail\_IMBIV51240.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## $\textbf{Number of Observations} \colon 0$

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat \_

The species is found in perennial-water: ponds, lakes, rivers, and streams of all sizes, typically in muddy bottoms among aquatic vegetation (Clarke 1981:420).

### Walker Peaclam - Pisidium walkeri

http://FieldGuide.mt.gov/detail\_IMBIV51250.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

#### Habitat .

The species is found in creeks, rivers, and small lakes and ponds with soft bottoms. It is generally not abundant, although it can be in "small lakes that are filling up with marl." It seems to prefer small lakes or ponds. The species has been collected in mud, sand and boulder, and marly clay bottoms; at depths of 0.6 to 6.1 m (La Rocque 1967:345). Clarke (1981:422) states the species is rather uncommon and occurs in permanent ponds, lakes, rivers, and streams. It is generally found among vegetation, and on a variety of substrates.

# A Bark Beetle - *Pityogenes carinulatus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZZ010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZZ010.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityogenes fossifrons* <a href="http://FieldGuide.mt.gov/detail\_IICOLZZ020.aspx">http://FieldGuide.mt.gov/detail\_IICOLZZ020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityogenes knechteli* <a href="http://FieldGuide.mt.gov/detail\_IICOLZZ050.aspx">http://FieldGuide.mt.gov/detail\_IICOLZZ050.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityokteines lasiocarpi* <a href="http://FieldGuide.mt.gov/detail\_IICOL7A020.aspx">http://FieldGuide.mt.gov/detail\_IICOL7A020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Bark Beetle - *Pityokteines minutus* http://FieldGuide.mt.gov/detail\_IICOL7A030.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityokteines ornatus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7A040.aspx">http://FieldGuide.mt.gov/detail\_IICOL7A040.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus absonus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM010.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus alpinensis* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM020.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus aquilus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM030.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM030.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus boycei* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM040.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM040.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus confertus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM050.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM050.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus confinis* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM060.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM060.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus digestus* http://FieldGuide.mt.gov/detail\_IICOLZM070.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus fuscus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM080.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM080.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus murrayanae* <a href="http://FieldGuide.mt.gov/detail\_IICO196991.aspx">http://FieldGuide.mt.gov/detail\_IICO196991.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus nitidus* <a href="http://FieldGuide.mt.gov/detail\_IICO196992.aspx">http://FieldGuide.mt.gov/detail\_IICO196992.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus pseudotsugae* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM090.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM090.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Bark Beetle - *Pityophthorus scalptus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM110.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM110.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pityophthorus tuberculatus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZM100.aspx">http://FieldGuide.mt.gov/detail\_IICOLZM100.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### File Rams-horn - Planorbella pilsbryi

http://FieldGuide.mt.gov/detail\_IMGASN0130.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

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### Rough Rams-horn - Planorbella subcrenata

http://FieldGuide.mt.gov/detail\_IMGASN0190.aspx



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

#### Hahitat

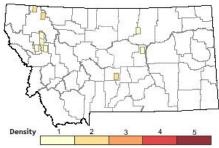
### Marsh Rams-horn - Planorbella trivolvis

http://FieldGuide.mt.gov/detail\_IMGASN0170.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 12

#### Habitat

### Thicklip Rams-horn - Planorbula armigera

http://FieldGuide.mt.gov/detail\_IMGASN0020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### $\textbf{Number of Observations} \colon 1$

#### Habitat

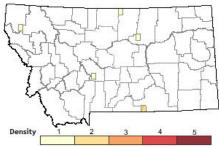
### Meadow Rams-horn - Planorbula campestris

http://FieldGuide.mt.gov/detail\_IMGASN0050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 6$

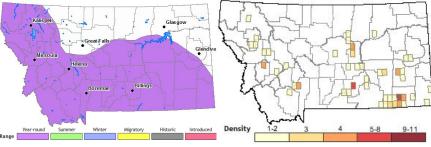
#### Hahitat

### Common Whitetail - Plathemis lydia

http://FieldGuide.mt.gov/detail\_IIODO45190.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 102$ 

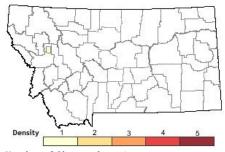
Common Whitetail habitat includes muddy bottomed ponds, lakes, marshes, slow streams and stream pools, as well as stock ponds and rarely even bogs (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

### Ranchman's Tiger Moth - Platyprepia virginalis

http://FieldGuide.mt.gov/detail\_IILEY32010.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 1

### **General Description**

The forewing of the Ranchman's Tiger Moth (*Platyprepia virginalis*) is black with many large and round yellow spots. The hindwing is variable, either orange with black bands or mostly black with orange spots. The thorax is black with dorsal-anterior patches of yellow. The wingspan is about 62 mm (USGS 2006).

# A Mayfly - *Plauditus dubius* http://FieldGuide.mt.gov/detail\_IIEPH78040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - *Plauditus gloveri* http://FieldGuide.mt.gov/detail\_IIEPH78130.aspx



Global Rank: G5 State Rank: SNR

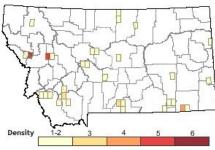
AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - *Plauditus punctiventris* http://FieldGuide.mt.gov/detail\_IIEPH78050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - *Plauditus virilis* http://FieldGuide.mt.gov/detail\_IIEPH78060.aspx



Global Rank: G5 State Rank: SNR

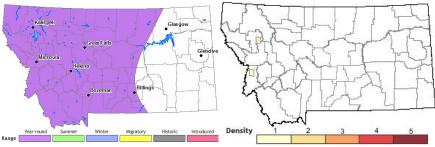
AGENCY STATUS USFWS: USFS: BLM:

### Arctic Blue - Plebejus glandon

http://FieldGuide.mt.gov/detail\_IILEPH0050.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 2

#### **General Description**

The Arctic Blue (*Plebejus glandon*) is geographically variable. The upperside of the male is gray-blue, and the is female orange-brown. Both sexes have dark cell spots on both wings. The underside of the hindwing has postmedian black spots lacking or enclosed by white patches. The wing span is 22 - 26 mm (Opler et al. 2010).

Bogs, tundra, gravelly hills, alpine fell-fields, and subalpine meadows (Opler et al. 2010).

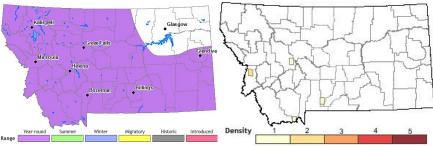
### Boisduval's Blue - Plebejus icarioides

http://FieldGuide.mt.gov/detail\_IILEPG8010.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 5

#### **General Description**

The upperside of the male Boisduval's Blue (*Plebejus icarioides*) is lilac-blue with dark borders. The female upperside may be brown, or blue with wide dark borders. On the underside, the black or white postmedian spots are larger on the forewing than on the hindwing. The wing span is about 29 - 35 mm (Opler et al. 2010).

#### Habitat .

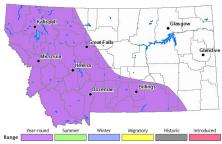
Forest clearings and edges, prairie, sagebrush, chaparral, coastal dunes, fields (Opler et al. 2010).

# Northern Blue - *Plebejus idas* http://FieldGuide.mt.gov/detail\_IILEPG5010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



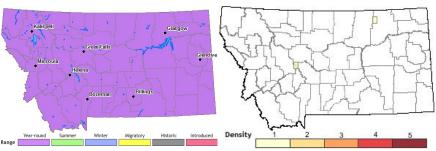
### Lupine Blue - Plebejus Iupini

http://FieldGuide.mt.gov/detail\_IILEPG8040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

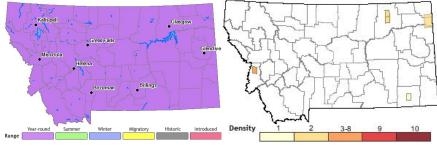
### **General Description**

The upperside of the male Lupine Blue (*Plebejus lupini*) is lilac blue with wide dark borders. The uppeside of the female is dark brown. The band at hindwing outer margin is wide, and orange-red. In males the band may be divided into separate chevrons. The wing span is about 22 - 29 mm (Poole no date).

### Melissa Blue - *Plebejus melissa* http://FieldGuide.mt.gov/detail\_IILEPG5020.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 16$ 

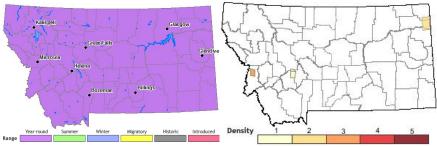
### Greenish Blue - Plebejus saepiolus

http://FieldGuide.mt.gov/detail\_IILEPG6010.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 6

#### **General Description**

The upperside of the male Greenish Blue (*Plebejus saepiolus*) is iridescent green-blue. The upperside of the female is brown with blue at wing bases. The underside is pale gray with green at wing bases and rows of irregular black spots. The wing span is about 25 - 32 mm (Opler et al. 2010).

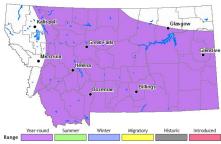
Bogs, roadsides, stream edges, open fields, meadows, open forests (Opler et al. 2010).

# Shasta Blue - *Plebejus shasta* http://FieldGuide.mt.gov/detail\_IILEPG8020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

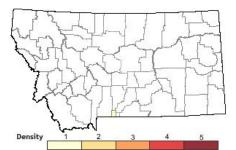


### Margined Sallfly - *Plumiperla diversa* <a href="http://FieldGuide.mt.gov/detail\_IIPLE16010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE16010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 1

#### **General Description**

Nymphs and adults within the Chloroperliidae are small green and yellow stoneflies. Known to fly-fisherman as "little yellows", "little greens" and "Yellow Sallies". This family is well represented in Montana with 26 species, one of the larger families in the order Plecoptera, containing some 100 species distributed throughout the Holarctic region of North America. The adults are emerging in late spring and throughout summer.

# **Least Forestfly -** *Podmosta decepta* <a href="http://FieldGuide.mt.gov/detail\_IIPLE0P010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0P010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# **Delicate Forestfly -** *Podmosta delicatula* <a href="http://FieldGuide.mt.gov/detail\_IIPLE0P020.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0P020.aspx</a>



Global Rank: G5 State Rank: SNR

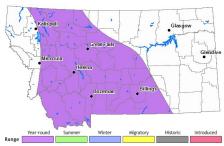
AGENCY STATUS USFWS: USFS: BLM:

# Draco Skipper - *Polites draco* http://FieldGuide.mt.gov/detail\_IILEP66040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Long Dash - *Polites mystic* http://FieldGuide.mt.gov/detail\_IILEP66080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



# Crossline Skipper - *Polites origenes* <a href="http://FieldGuide.mt.gov/detail\_IILEP66070.aspx">http://FieldGuide.mt.gov/detail\_IILEP66070.aspx</a>



Global Rank: G4G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

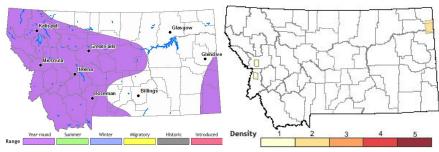


# Peck's Skipper - *Polites peckius* <a href="http://FieldGuide.mt.gov/detail\_IILEP66010.aspx">http://FieldGuide.mt.gov/detail\_IILEP66010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Rhesus Skipper - Polites rhesus

http://FieldGuide.mt.gov/detail\_IILEP66110.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS

USFWS: USFS: BLM:



Number of Observations: 0

#### General Description

This small (male FW 1.2-1.3cm) gray-brown skipper has triangular wings, brilliant white fringes, and variably developed white spotting above. The stigma is inconspicuous. Females have more white markings than males, often forming a confluent FW [forewing] band (Stanford, 1981). The distance from wingtip to wingtip of the forewings is 1-1 1/4in. (25-31mm). Fringes white. Upperside: Male blackish brown; FW stigma obscured by ground color. Spots near FW apex and pm. spots white. HW [hindwing] often has a light central chevron. Female similar, but FW spots much larger; HW markings also larger. Underside: HW greenish buff to light brown in both sexes, with irregular dark spots. Veins white. Pm. [post-median] band white, forming a part of the general pattern (Tilden and Smith, 1986). The VHW [ventral hindwing] has white basal and postdiscal marking, with extensions along the veins, against a splotchy black and light yellow-green background. Similar species: HESPERIA UNCAS is larger and fulvous above with silver-centered stigma in males and yellow spots in females; Y. CARUS (Stanford, 1981). Carus Skipper is lighter; fringes not white (Tilden and Smith, 1986). Genitalia show that Yvretta (Hemming) constitutes a new species group of Polites (Scuddor). The male genitalia of the rhesus group are not diagnostic at the specific level. External color pattern on the underside of the hindwing sets P. RHESUS apart from P. SUBRETICULATA (Burns, 1994).

#### Habitat

Shortgrass and mixed grass prairie (B86SC001COUS).

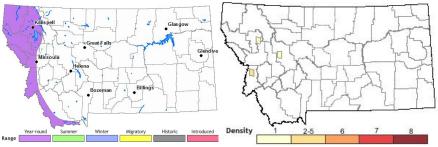
### Sandhill Skipper - Polites sabuleti

http://FieldGuide.mt.gov/detail\_IILEP66020.aspx



Global Rank: G5 State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 7

#### **General Description**

The sandhill skipper (*Polites sabuleti*) is common and quite variable. The upperside of the male is yellow-orange with dark toothed borders and a sinuous stigma on the forewing. The upperside of the female has heavier dark markings, almost transparent light spots, and no stigma. The underside of the hindwing in both sexes is yellow-tan with yellow veins, dark chevrons between the veins at the outer margin, and dark spots at the vein ends. The wing span is about 22 - 32 mm (Opler, Lotts, and Naberhaus 2010).

### Habitat .

Alkali grasslands, moist meadows, lawns, salt marshes, sand dunes, sagebrush flats, and alpine fell-fields (Opler et al. 2010).

# Sonoran Skipper - *Polites sonora* http://FieldGuide.mt.gov/detail\_IILEP66090.aspx



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

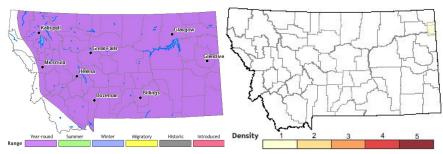


# Tawny-edged Skipper - *Polites themistocles* <a href="http://FieldGuide.mt.gov/detail\_IILEP66060.aspx">http://FieldGuide.mt.gov/detail\_IILEP66060.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### A Planarid Worm - Polycelis coronata

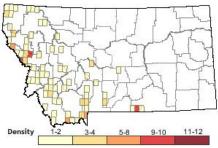
http://FieldGuide.mt.gov/detail\_IPTUR10020.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 203

#### **General Description**

This flatworm species is a cold-water stenotherm (preferring water tempertures in the range of 6-10 degrees C) and occurs throughout Montana's small mountian streams east and west fo the Continental divide and especially in cold spring-influenced streams and creeks. You can find them clinging underneath cobbles and boulders during the day and patrolling during the evening looking for food, generally scavengers, eating other dead invertebrates or vertebrates (pers. observation of ~10 of these feeding on a dead tailed frog larvae in the upper St. Regis Basin).

# A Caddisfly - Polycentropus cinereus http://FieldGuide.mt.gov/detail\_IITRI05180.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Polycentropus denningi http://FieldGuide.mt.gov/detail\_IITRI65820.aspx



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Caddisfly - Polycentropus flavus http://FieldGuide.mt.gov/detail\_IITRI05020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Polycentropus halidus http://FieldGuide.mt.gov/detail\_IITRI05380.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Polycentropus remotus http://FieldGuide.mt.gov/detail\_IITRI05030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Polycentropus variegatus http://FieldGuide.mt.gov/detail\_IITRI65890.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Millipede - *Polydesmus inconstans* <a href="http://FieldGuide.mt.gov/detail\_ITUNI58030.aspx">http://FieldGuide.mt.gov/detail\_ITUNI58030.aspx</a>



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# Eastern Comma - *Polygonia comma* <a href="http://FieldGuide.mt.gov/detail\_IILEPK5020.aspx">http://FieldGuide.mt.gov/detail\_IILEPK5020.aspx</a>



Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



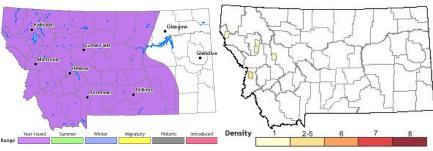
### **Green Comma - Polygonia faunus**

http://FieldGuide.mt.gov/detail\_IILEPK5040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### $\textbf{Number of Observations} \colon 9$

### **General Description**

The Green Comma (*Polygonia faunus*) has extremely ragged wing edges. It is geographically variable. The upperside is reddish brown with wide dark borders. The hindwing border contains yellow spots. The underside is brown, and the outer half is lighter. The submarginal spots are greenish. The hindwing has a L- or C-shaped silver spot in center. The wing span is 45 - 64 mm (Opler et al. 2010).

#### Habitat

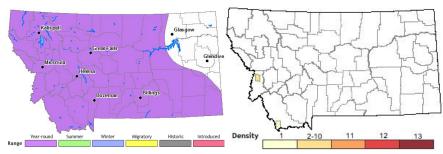
Forests, mountain streamsides, canyons (Opler et al. 2010).

# Hoary Comma - *Polygonia gracilis* http://FieldGuide.mt.gov/detail\_IILEPK5080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

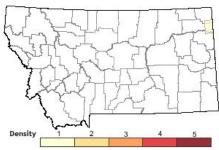


# Question Mark - *Polygonia interrogationis* <a href="http://FieldGuide.mt.gov/detail\_IILEPK5010.aspx">http://FieldGuide.mt.gov/detail\_IILEPK5010.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

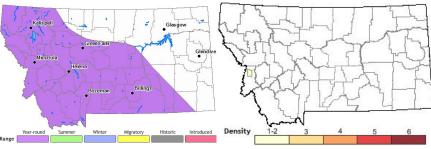


Number of Observations: 1

# Oreas Anglewing - *Polygonia oreas* <a href="http://FieldGuide.mt.gov/detail\_IILEPK5090.aspx">http://FieldGuide.mt.gov/detail\_IILEPK5090.aspx</a>



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



### Gray Comma - Polygonia progne

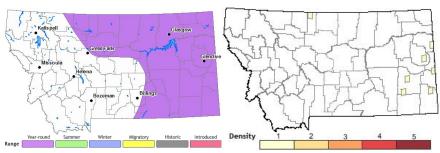
http://FieldGuide.mt.gov/detail\_IILEPK5100.aspx



#### **Species of Concern**

Global Rank: G4G5 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 7

#### **General Description**

The Gray Comma is a medium sized butterfly 1 5/8 - 2 1/2 inches. Upperside is bright orange-brown; with a wide dark border, winter form has the border covering only about 1/4 of the wing; both enclosing a few small yellow spots. Underside is charcoal gray with fine dark striations; forewing with 3-4 light chevrons in a dark border. Silver mark in center of hindwing is small, slender, and L-shaped.

#### Habitat .

Along dirt roads, along streamsides, and within clearings in rich deciduous or confierous woods, in aspen parks, yards, and gardens. Often in hilly terrain or canyons.(Opler and Wright 1999).

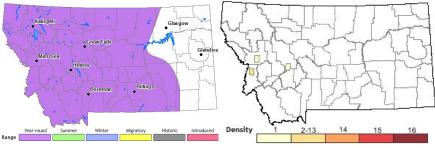
### Satyr Comma - Polygonia satyrus

http://FieldGuide.mt.gov/detail\_IILEPK5030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 15$ 

#### **General Description**

Yellowish-orange dorsally with black spots and brown forewing borders. Hindwing borders are pale, suffused with ground colour and contain yellowish spots. Females may have indistinct dorsal wing borders which may be barred. Ventrally, the males are brown and yellowish-brown with dots and striations. The hindwing contains a silvery comma, hooked or enlarged at the lower end. The ventral surface of the females is reddish-brown with a brown band in the middle of each wing. The comma is not a distinct as in males (B89KLA01SKCA).

# A Bark Beetle - *Polygraphus rufipennis* <a href="http://FieldGuide.mt.gov/detail\_IICO197092.aspx">http://FieldGuide.mt.gov/detail\_IICO197092.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### Humped Coin - Polygyrella polygyrella

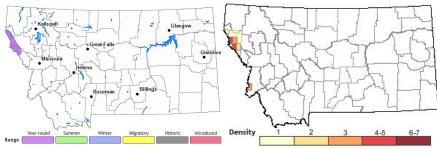
http://FieldGuide.mt.gov/detail\_IMGASB3010.aspx



#### **Species of Concern**

Global Rank: G3 State Rank: S1S2





Number of Observations: 23

The species is often found in moist forests of *Pseudotsuga menziezii* and *Picea engelmannii*, often in association with outcrops and talus of various rock types (Bland and Cooper 1861, Pilsbry 1939, Frest and Johannes 1995). Inhabits moss and decaying wood in dampest areas of forest cover (Bland and Cooper 1861, Cooper 1868); moist valley, ravine, and talus sites are preferred, apparently near water (Frest and Johannes 1995).

### Purcell Needlefly - Pomoleuctra purcellana

http://FieldGuide.mt.gov/detail\_IIPLE0D060.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

This is a small black stonefly in the family; Leuctridae. Like most of the species in the rolled-winged family, this species hatches early in the year often when snow is still on the ground, where they can be noticed quite easily crawling around along the banks of streams.

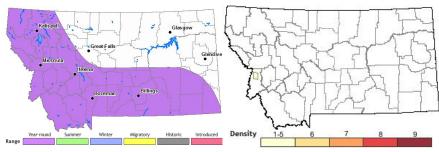
### Becker's White - Pontia beckerii

http://FieldGuide.mt.gov/detail\_IILEPA1010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



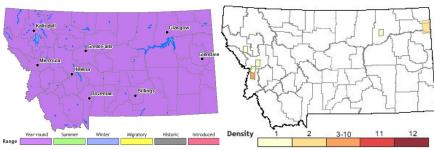
### Western White - Pontia occidentalis

http://FieldGuide.mt.gov/detail\_IILEPA1040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



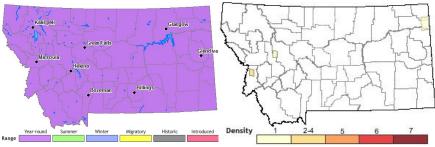
### Checkered White - Pontia protodice

http://FieldGuide.mt.gov/detail\_IILEPA1030.aspx



Global Rank: G4 State Rank: S4 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 6

#### **General Description**

The upperside of the male Checkered White (*Pontia protodice*) forewing has a black checkered pattern on outer half. The female is more heavily patterned, but markings are more brown and diffuse. The hindwing of both the male and female is white. The underside of male hindwing has a pale checkered pattern. The underside of the female has yellow-tan markings on the hindwing and the tip of the forewing. A short-day form appears in the spring and fall. The short-day form has underside hindwing veins with heavy gray-green outlines. The wingspan is about 38 - 63 mm (Opler et al. 2010).

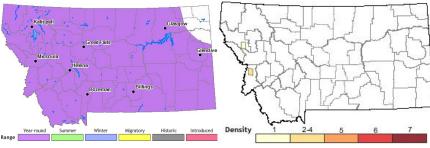
#### Habitat

Wide variety of sites including dry weedy areas, vacant lots, fields, pastures, sandy areas, railroad beds, and roads (Opler et al. 2010).

# Spring White - *Pontia sisymbrii* <a href="http://FieldGuide.mt.gov/detail\_IILEPA1020.aspx">http://FieldGuide.mt.gov/detail\_IILEPA1020.aspx</a>



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 5$ 

### New Zealand Mudsnail - Potamopyrgus antipodarum

http://FieldGuide.mt.gov/detail\_IMGASY1010.aspx



#### Number of Observations: 5

#### **General Description**

This is an introduced species to MT with an expanding distribution in the Missouri, Yellowstone, and Bighorn Rivers. It is not known in Montana west of divide. In Montana this species was first discovered in the Madison River above Hebgen Reservoir in 1995 (Gustafson pers. comm). However, the very large population present at that time indicataes that the introduction was a few years earlier. It is a native of New Zealand, but long established in Australia and Europe. This species has been known in North America since 1987 in the Snake River basin of Idaho

#### Habitat .

New Zealand mud snails appear to prefer flowing water habitats with stable flows. Springs, spring creeks, and river sections downstream from dams are all places that they thrive in. They are most typically found on larger cobble substrates or on pieces of wood.

Exotic Species (not native to Montana)

Global Rank: G5 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:

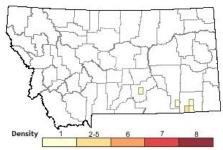
## A Caddisfly - Potamyia flava

http://FieldGuide.mt.gov/detail\_IITRIB7010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### $\textbf{Number of Observations} \colon 9$

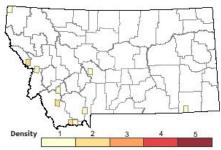
Instream habitat: Hydropsychid larval populations can be very abundant in many Montana river aquatic communities. Larvae are restricted to moderate or fast flowing waters (very cold: Parapsyche--warmwater: Cheumatopsyche), living on cobbles/rocks, boulders or submerged logs

# A Potthastian Chironomid - *Potthastia gaedii* <a href="http://FieldGuide.mt.gov/detail\_IIDIPON010.aspx">http://FieldGuide.mt.gov/detail\_IIDIPON010.aspx</a>



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

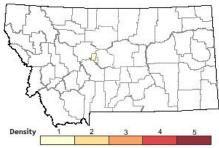


# Northern Tightcoil - *Pristiloma arcticum* <a href="http://FieldGuide.mt.gov/detail\_IMGAS80010.aspx">http://FieldGuide.mt.gov/detail\_IMGAS80010.aspx</a>



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# Black-footed Tightcoil - *Pristiloma chersinella* <a href="http://FieldGuide.mt.gov/detail\_IMGAS80020.aspx">http://FieldGuide.mt.gov/detail\_IMGAS80020.aspx</a>



Global Rank: G3G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

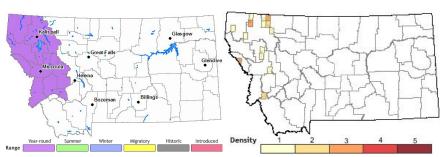
# Shiny Tightcoil - *Pristiloma wascoense* http://FieldGuide.mt.gov/detail\_IMGAS80140.aspx



#### **Species of Concern**

Global Rank: G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



# **Delta Hydrobe -** *Probythinella emarginata* <a href="http://FieldGuide.mt.gov/detail\_IMGASH8010.aspx">http://FieldGuide.mt.gov/detail\_IMGASH8010.aspx</a>



Global Rank: G5 State Rank: SNR

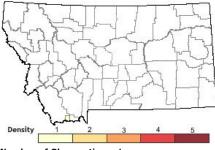
AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0	
General Description	_
The validity of the species name, emarginata, is controversial (see Hershler, 1996). It used to be known as "lacustris"	
Habitat	
Freshwater.	_

# A Mayfly - Procloeon pennulatum http://FieldGuide.mt.gov/detail\_IIEPH74140.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



 $\ \, \textbf{Number of Observations} \colon 1 \\$ 

# A Bark Beetle - *Procryphalus mucronatus* <a href="http://FieldGuide.mt.gov/detail\_IICOLZR010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZR010.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

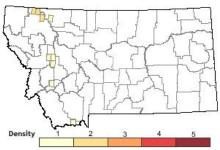
#### **Sharp Sprite - Promenetus exacuous**

http://FieldGuide.mt.gov/detail\_IMGASN1010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 12

#### **General Description**

The range of Promenetus exacuous from Atlantic to Pacific Coasts of North America, from New Mexico, Nevada, and northern Texas to the Arctic-Boreal Transition Zone in Canada (Burch 1989, Jokinen 1992). It occurs in quiet, shallow areas of lakes and rivers, as well as intermittent or permanent streams and ponds (Clarke 1981, Jokinen 2005). The only location that we have in the database is for the Red Rock River wetlands refuge in Montana

It occurs in quiet, shallow areas of lakes and rivers, as well as intermittent or permanent streams and ponds (Clarke 1981, Jokinen 1992, Jokinen 2005).

## **Prairie Sprite - Promenetus exacuous megas**

http://FieldGuide.mt.gov/detail\_IMGASN1011.aspx



Global Rank: G5T4 State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

#### **General Description**.

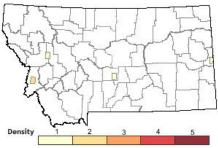
According to Frest and Johannes (1995) Dall's 1910 work and Clarke (1973 and 1981) are the preferred sources for description. Both of these sources include illustrations (Frest and Johannes, 1995).

# Umbilicate Sprite - *Promenetus umbilicatellus* <a href="http://FieldGuide.mt.gov/detail\_IMGASN1020.aspx">http://FieldGuide.mt.gov/detail\_IMGASN1020.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Reticulate Taildropper - Prophysaon andersoni

http://FieldGuide.mt.gov/detail\_IMGAS62010.aspx

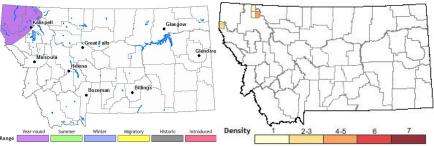


#### **Species of Concern**

Global Rank: G5 State Rank: S1S2

AGENCY STATUS USFWS: USFS:

BLM:



#### $\textbf{Number of Observations} \colon 10$

#### **General Description**

A moderately large slug of about 50 mm extended, but may reach 60 mm or slightly larger. Dorsal base color varies from dark grayish-brown to reddish-brown or yellowish, a diamond-mesh furrow pattern on the foot, sometimes highlighted with dark pigment. The mantle is 1/3 to 2/5 the body length, is sometimes distinctly paler, and appears granular, with a pair of dark lateral bands. Head color similar to foot, but antennae often darker. Pneumostome is near the middle of the mantle in the anterior half, and on the right side. The tail is not keeled, although there may be a lighter mid-dorsal stripe in some individuals. The sole is undivided (not tripartite) and pale, with a line of abscission near the posterior quarter (sometimes distinct only under magnification); the mucous is yellow to orange, especially in disturbed animals.

#### Habitat .

Mostly in mesic mixed conifer forest, often relatively close to water. Canopy species include western redcedar, western hemlock, grand fir, Douglas-fir, black cottonwood, paper birch, aspen, Engelmann spruce, western larch, western white pine, and lodgepole pine, with secondary canopy sometimes including alder, Pacific yew and mountain ash. Usually found under woody debris and leaf litter or in downed rotten wood, sometimes under rocks.

### Smoky Taildropper - Prophysaon humile

http://FieldGuide.mt.gov/detail\_IMGAS62070.aspx

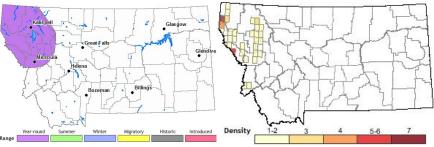


#### **Species of Concern**

Global Rank: G3 State Rank: S2S3

AGENCY STATUS USFWS:

USFS: BLM:



#### Number of Observations: 56

#### **General Description**

Pilsbry (1948) states "Body above and mantle smoke-color, obscured by bands. Mantle wrinkled, and having a broad dorsal and two lateral blackish bands, reducing the ground-color to two obscure pale sub-dorsal bands" (p. 699). Length of mantle for a 16.5 mm long specimen in alcohol was 7 mm, breadth 5.5 mm. Body is subcylindrical and somewhat tapering and somewhat blunt at the end. The back has a blackish band reaching a little more than half its length, with lateral darker blackish bands reaching its whole length. Reticulations are distinct. The sole is not differentiated into tracts. Some Idaho specimens have the head, neck, and ground color elsewhere of a very light gray. The mantle is about half of the total length, with the pneumostome at about the anterior third, and the forward lobe of the mantle is free as far back as the pneumostome. Total length is up to about 2.5 cm. The internal anatomy is described and illustrated in Pilsbry (1948).

Taxanomic Comment: The original species description by Cockerell (1890) and placement in the Arionidae are still valid (see also Pilsbry 1948). The genus consists of nine recognized species endemic to northwestern North America.

#### Habitat

Prophysaon humile has been found in moist woods under bark of rotten logs, sometimes on north-facing slopes, as well as in bog and spruce valleys in western white pine forests, and sometimes in talus sites at the base of major slopes in river and stream valleys (Pilsbry 1948; Frest and Johannes 1995). Occupied habitat is probably similar to sites where Prophysaon dubium has been found in Idaho (Leonard et al. 2003).

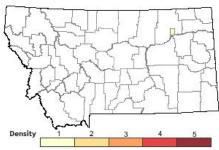
Habitat at recently documented sites included canopies containing western redcedar, grand fir, Douglas-fir, Engelmann spruce, subalpine fir, lodgepole pine, western hemlock, alder, paper birch, and black cottonwood. Often times is has been found near water along streams under downed rotten wood, bryophyte mats, or rocks (Hendricks et al. 2006, 2007).

# Juanita Sphinx - *Proserpinus juanita* <a href="http://FieldGuide.mt.gov/detail\_IILEX13020.aspx">http://FieldGuide.mt.gov/detail\_IILEX13020.aspx</a>



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



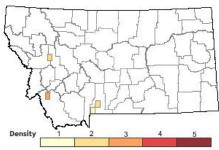
Number of Observations: 1

# Banded Forestfly - *Prostoia besametsa* http://FieldGuide.mt.gov/detail\_IIPLE0Q010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Protoptila coloma http://FieldGuide.mt.gov/detail\_IITRI66330.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - *Protoptila erotica* <a href="http://FieldGuide.mt.gov/detail\_IITRI34020.aspx">http://FieldGuide.mt.gov/detail\_IITRI34020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Protoptila tenebrosa http://FieldGuide.mt.gov/detail\_IITRI66350.aspx



Global Rank: G5 State Rank: SNR

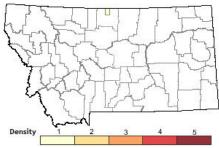
AGENCY STATUS USFWS: USFS: BLM:

# White Sand-river Mayfly - *Pseudiron centralis* <a href="http://FieldGuide.mt.gov/detail\_IIEPH04020.aspx">http://FieldGuide.mt.gov/detail\_IIEPH04020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# A Bark Beetle - *Pseudohylesinus granulatus* <a href="http://FieldGuide.mt.gov/detail\_IICOLHC010.aspx">http://FieldGuide.mt.gov/detail\_IICOLHC010.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Pseudohylesinus nebulosus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7H020.aspx">http://FieldGuide.mt.gov/detail\_IICOL7H020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Bark Beetle - *Pseudohylesinus nebulosus nebulosus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7H021.aspx">http://FieldGuide.mt.gov/detail\_IICOL7H021.aspx</a>



Global Rank: GNRTNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# Mimic Lymnaea - *Pseudosuccinea columella* <a href="http://FieldGuide.mt.gov/detail\_IMGASL3010.aspx">http://FieldGuide.mt.gov/detail\_IMGASL3010.aspx</a>



# Density

Number of Observations: 17

#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Psychoglypha alascensis http://FieldGuide.mt.gov/detail\_IITRI65380.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Psychoglypha prita http://FieldGuide.mt.gov/detail\_IITRI65410.aspx



Global Rank: G3G4 State Rank: SNR

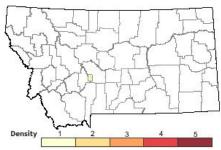
AGENCY STATUS USFWS: USFS: BLM:

# A Caddisfly - Psychoglypha subborealis http://FieldGuide.mt.gov/detail\_IJTRIF2020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



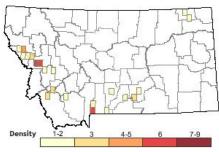
Number of Observations: 1

# A Caddisfly - *Psychomyia flavida* http://FieldGuide.mt.gov/detail\_IITRI82010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Caddisfly - Psychomyia nomada http://FieldGuide.mt.gov/detail\_IITRI82020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Least Salmonfly - Pteronarcella badia

http://FieldGuide.mt.gov/detail\_IIPLE2U010.aspx



#### Number of Observations: 86

**General Description** 

This species is the smaller cousin to the Giant Salmonfly, and is still a fairly large stonefly species, up to 2 inches long. In late-May to early July, adults are hatching after spending 2 years as nymphs on the bottom of the stream. The Least Salmonfly range in Montana occurs in most western drainages and in the mountain and foothill Missouri and Yellowstone Drainages downstream until the water temperatures become to warm. They can tolerate warmer water temperatures than other species in the Pteronarcys genus and overlap with the giant salmonflies in the upper reaches of the larger rivers like the Yellowstone, Clark Fork, Smith and Missouri.

#### Habitat

Pteronarcella nymphs are found in fast flowing streams and rivers below 8000 ft (Baumann et al. 1977). They prefer large cobbles and boulders as substrate, as well as logjams where leaf materials can accumulate.

Global Rank: G5 State Rank: SNR

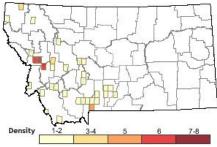
AGENCY STATUS USFWS: USFS:

BLM:

## Giant Salmonfly - Pteronarcys californica

http://FieldGuide.mt.gov/detail\_IIPLE2V020.aspx





#### Number of Observations: 73

#### **General Description**

This is the famous Salmonfly, and is the largest species of all mayflies, stoneflies or caddisflies hatching on any western river, up to 3 inches long. In late-May to early July, adults are hatching and providing trout fisherman with exciting dry-fly fishing on the surface or underwater with large artificial nymphs. Adults are fairly weak fliers and are very conspicuous by their size and erratic flight over the river making them easy pickings for feeding trout or insectivrous birds. The Giant Salmonfly range in Montana only overlaps with one other potentially confusing species; the American Salmonfly, Pteronarcys dorsata which has been reported to occur in the Smith and Missouri River basins. For an in depth report on the assessment of this species in Montana go online: http://mtnhp.org/reports/MT\_Salmonfly.pdf

#### Habitat .

Salmonfly nymphs live on the bottom, crawling around on cobbles and feeding on large organic materials (leaves) in the spaces between rocks for three to sometimes four years. They require well-oxygenated water, so they thrive in swift, bouldery, riffly stretches of the river; narrow canyon reaches such as Yankee Jim Canyon of the Yellowstone, Alberton Gorge of the Clark Fork River, Big Hole Canyon between Glen and Wise River or Bear Trap Canyon of the Madison are ideal habitat.

Global Rank: G5 State Rank: SNR

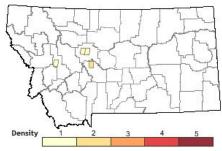
AGENCY STATUS

USFWS: USFS: BLM:

## American Salmonfly - Pteronarcys dorsata

http://FieldGuide.mt.gov/detail\_IIPLE2V040.aspx





#### $\textbf{Number of Observations} \colon 5$

#### **General Description**

This species is not as famous as the Giant Salmonfly, but is still one of the largest species of all mayflies, stoneflies or caddisflies hatching on any cold water river, up to 2.5 inches long. In late-May thru early July, adults are hatching and providing trout fisherman with exciting dry-fly fishing on the surface or with large artificial nymphs. Adults are fairly weak fliers and are very conspicuous by their size and erratic flying over the river making them easy pickings for feeding trout and insectivorous birds. The American Salmonfly range in Montana has been reported in the Smith and Missouri River systems potentially being confused with the Giant Salmonfly.

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Habitat

Salmonfly nymphs live on the bottom, crawling around on cobbles and feeding on large organic materials (leaves) in the spaces between rocks for three to sometimes four years. They require well-oxygenated water, so they thrive in swift, bouldery, riffly stretches of the river; narrow canyon reaches are ideal habitat.

## A Caddisfly - Ptilostomis ocellifera

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRIB8010.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Caddisfly - Ptilostomis semifasciata

http://FieldGuide.mt.gov/detail\_IITRIB8030.aspx



Global Rank: G5 State Rank: SNR

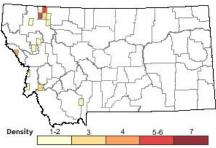
AGENCY STATUS USFWS: USFS: BLM:

# Ribbed Spot - *Punctum californicum* <a href="http://FieldGuide.mt.gov/detail\_IMGAS47020.aspx">http://FieldGuide.mt.gov/detail\_IMGAS47020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

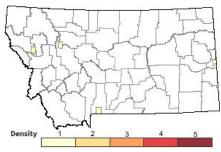


# Small Spot - *Punctum minutissimum* <a href="http://FieldGuide.mt.gov/detail\_IMGAS47040.aspx">http://FieldGuide.mt.gov/detail\_IMGAS47040.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



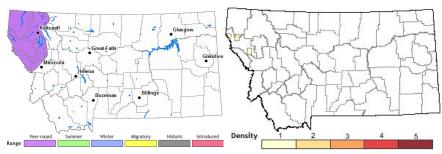
Number of Observations: 4

# Conical Spot - *Punctum randolphi* <a href="http://FieldGuide.mt.gov/detail\_IMGAS47050.aspx">http://FieldGuide.mt.gov/detail\_IMGAS47050.aspx</a>



Global Rank: G4 State Rank: SNR

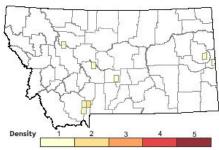
AGENCY STATUS USFWS: USFS: BLM:



# Rocky Mountain Column - *Pupilla blandi* <a href="http://FieldGuide.mt.gov/detail\_IMGAS17010.aspx">http://FieldGuide.mt.gov/detail\_IMGAS17010.aspx</a>



Global Rank: G4G5 State Rank: SNR



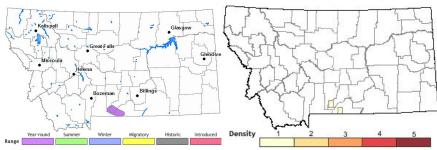
Number of Observations: 9

# Crestless Column - *Pupilla hebes* <a href="http://FieldGuide.mt.gov/detail\_IMGAS17020.aspx">http://FieldGuide.mt.gov/detail\_IMGAS17020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

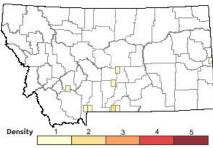


Number of Observations: 2

# Widespread Column - *Pupilla muscorum* <a href="http://FieldGuide.mt.gov/detail\_IMGAS17030.aspx">http://FieldGuide.mt.gov/detail\_IMGAS17030.aspx</a>



Global Rank: G5 State Rank: SNR

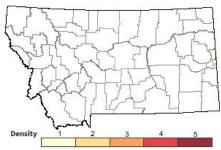


Number of Observations: 9

# **Top-heavy Column -** *Pupilla syngenes* <a href="http://FieldGuide.mt.gov/detail\_IMGAS17050.aspx">http://FieldGuide.mt.gov/detail\_IMGAS17050.aspx</a>



Global Rank: G4 State Rank: SNR



Number of Observations: 1

# A Caddisfly - Pycnopsyche guttifera http://FieldGuide.mt.gov/detail\_IITRI90020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

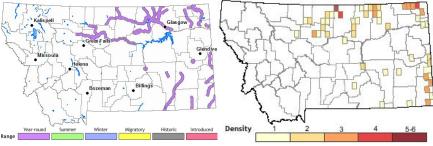
### Giant Floater - Pyganodon grandis

http://FieldGuide.mt.gov/detail\_IMBIV54030.aspx



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 97

### General Description

This light-shelled (somewhat fragile) species was previously known as Anodonta grandis ("no tooth"-indicating it's lack of a tooth on it's hinge). Shell smooth, light yellow or yellowish green with rays visible in younger specimens, becoming dark green to brown in older shells and the nacre is white. Length to 10 inches, usually size about 5-6 inches (100 to 150 mm). Unlike the other native MT mussels, it can be found in smaller prairie rivers and in intermittent streams, if permanent pools are present, and prefers softer benthic sediments. Many fish species are known to serve as hosts for this species. All of these are warm water species and most of them were introduced into Montana. The known native hosts are the freshwater drum, Iowa darter, brook stickleback and possibly channel catfish. This species is likely expanding it's range in Montana with the introduction and range expansion of more of its host fish. These include carp, bullheads, golden shiner, centrarchids and yellow perch.

### Habitat

The species is generally found in quiet backwaters of slow streams, rivers or lakes and prefers soft bottoms consisting of sand, silt and mud. Although, we do have records of this species occuring in a gravel/cobble mix in some small streams. It is usually found in water from a few centimeters to 2 m deep. A large number of shell types exist which exhibit various modifications in form as a result of adaption to varying environmental conditions (La Rocque 1967:185). Clarke (1981:298) reports the subspecies Anodonta grandis grandis [now Pyganodon grandis grandis] occuring in permanent ponds, rivers, and lakes of various sizes. It is most abundant on mud, but is found on all types of substrates.

# A Spring Snail - *Pyrgulopsis bedfordensis* <a href="http://FieldGuide.mt.gov/detail\_IMGASJ0380.aspx">http://FieldGuide.mt.gov/detail\_IMGASJ0380.aspx</a>



### **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 6

Found in a single spring on the west side of Canyon Ferry Reservoir

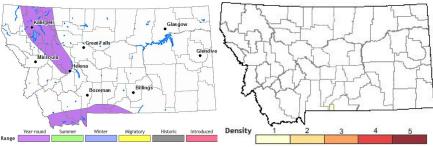
## Grizzled Skipper - Pyrgus centaureae

http://FieldGuide.mt.gov/detail\_IILEP38010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 1

### **General Description**

The fringes of the Grizzled Skipper's (*Pyrgus centaureae*) wings are checkered. The upperside is gray-black with squarish white checks. The underside of the hindwing is gray-brown to black checkered with whitish spots, and white veins. The male has a costal fold enclosing scent scales on the forewing (Opler et al. 2010).

### Habitat

Open areas near woods including valley bottoms, barrens, meadows, grassy hillsides, tundra, scrub oak openings (Opler et al. 2010).

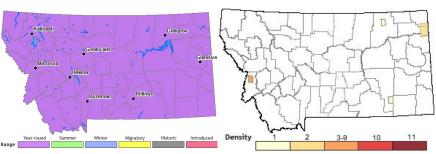
## Common Checkered-Skipper - Pyrgus communis

http://FieldGuide.mt.gov/detail\_IILEP38050.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 14

### **General Description**

The Common Checkered-skipper (*Pyrgus communis*) is a species of butterfly in the Hesperiidae family. It has a wingspan of 19 - 32 mm. It gets its name from the checkerboard pattern on its wings; the male tends to have broader bands than the female. The body tends to be blue-gray with the small amount of "fuzz" which is seen in all skippers.

The larvae has a black head and greenish-tan body. It has a dark line along its back and tends to be paler on the sides.

### Habitat .

The Common Checkered-skipper prefers gardens, parks, fields, roadsides, riverbanks, lowlands and foothills.

## Two-banded Checkered-skipper - Pyrgus ruralis

http://FieldGuide.mt.gov/detail\_IILEP38020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 0$ 

### General Description

The Two-banded checkered skipper is a small dark species with two rows of small hyaline spots on the upper surface of each wing. Those on the forewing are median and postmedian, while those on the hindwing are postmedian and submarginal. The narrow and frequently incomplete white ventral hind wing bands cross a mottled ochraceous to rusty background. Males have costal folds and tibial tufts. Similar species: CENTAUREAE, XANTHUS. [RURALIS is] not as two banded as CENTAUREAE, having also a weakly developed submarginal series on the dorsal forewing and a small basal dorsal hindwing dot. It is also darker and smaller [male forewing 1.2-1.3cm], with median white spots in spaces Cu1-Cu2 and Cu2-2A (Cu1, Cu2 = Two branches of the cubitus on the forewing; 2A=the second anal vein of the forewing) (Stanford, 1981).

### Habitat

Canadian Zone and sometimes Transition and lower Hudsonian Zone forest clearings (B86SC001COUS). Forest clearings and small meadows along streams, males frequent wet places along roads and trails (B81FER01COUS).

# Small Checkered Skipper - *Pyrgus scriptura* <a href="http://FieldGuide.mt.gov/detail\_IILEP38040.aspx">http://FieldGuide.mt.gov/detail\_IILEP38040.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

Year-round Range

## Mapleleaf - Quadrula quadrula

http://FieldGuide.mt.gov/detail\_IMBIV39120.aspx



# Kalispell Great Falls Glangow Historic Introduced Density 1 2 3 4 5

### Exotic Species (not native to Montana)

Global Rank: G5 State Rank: SNA

**AGENCY STATUS** 

USFWS: USFS: BLM:

### Number of Observations: 6

### **General Description**

The Maplelef is a relatively common mussel in the Missouri and Mississippi River drainages of North America, and has been recently introduced into MT's Tongue River and Lower Yellowstone River, likely from catfish or crappie stocking. It canbe found as far south as the Tennessee River, throughout the Midwest and Plains States (native in SD, ND). The Mapleleaf prefers pools of sluggish streams with a mud, sand, or fine gravel bottom. Known host fish species include the Common Carp, Catfish, Green Sunfish, White Crappie, 3 of these 4 species are introduced or exotic species in Montana. Mapleleafs have a fairly thick shell with well-developed teeth. Squared in outline, lateral surface with two rows of pustules separated by a sulcus.

### Habitat \_

Medium to large rivers and reservoirs with a mud, sand, or gravel bottom.

## Fir Pinwheel - Radiodiscus abietum

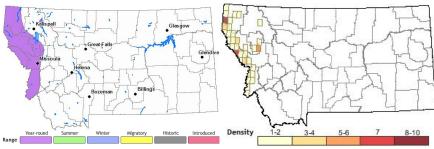
http://FieldGuide.mt.gov/detail\_IMGAS49020.aspx



### **Potential Species of Concern**

Global Rank: G4 State Rank: S3S4

AGENCY STATUS USFWS: USFS: BLM:

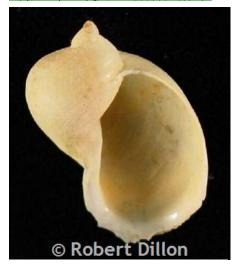


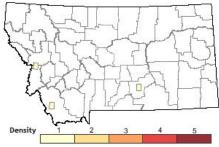
Number of Observations: 77

Surprisingly little detailed information is available. Most often found in moist and rocky Douglas-fir (*Pseudotsuga menziesii*) forest at mid-elevations in valleys and ravines (Frest and Johannes 1995). At some Montana locations, Western red cedar (*Thuja plicata*) formed the canopy. Often this species is found in or near talus of a variety of rock types or under fallen logs (Pilsbry 1948, Brunson and Russell 1967, Frest and Johannes 1995).

### Big-eared Radix - Radix auricularia

http://FieldGuide.mt.gov/detail\_IMGASL4010.aspx





### Number of Observations: 3

**General Description** 

Radix auricularia, the big-ear radix, is a species of medium-sized freshwater snail, an aquatic pulmonate gastropod mollusk in the family Lymnaeidae.

### Habitat .

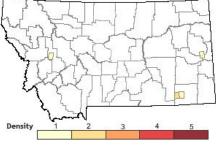
This species is found in freshwater lakes, ponds, and slow-moving rivers with mud bottoms. Radix auricularia can live on boulders or vegetation in low or high-flow environments, and is capable of tolerating anoxic conditions, but it tends to prefer very lentic waters in lakes, bogs or slow rivers where there is a silt substrate. It has been found in environments with a pH from 6.0-7.1.[5][17] Its average thermal preference is  $\sim 19^{\circ}$ C, but there is great fluctuation around this mean, depending on the photoperiod for the time of year.[18] In Great Britain, the species is restricted to hard water.[19] It can tolerate polysaprobic waters, or areas of major pollution and anoxia with high concentrations of organic matter, sulfides and bacteria.

### Exotic Species (not native to Montana)

Global Rank: G5 State Rank: SNA

# A Water Scorpion - Ranatra fusca http://FieldGuide.mt.gov/detail\_IIHEM44060.aspx





**Number of Observations:** 5

Global Rank: GNR State Rank: SNR

## A Mayfly - Raptoheptagenia cruentata

http://FieldGuide.mt.gov/detail\_IIEPH44010.aspx



# © MTNHP - Rhithron Associates Inc. Kalis pell Great Falls Glas gow Bullings Bulli

### Number of Observations : 19

### General Description

This mayfly species is a member of the large prairie river, sand-dwelling invertebrate assemblage of eastern Montana. It occurs in the cobble riffles and runs of the Powder and lower Missouri and Yellowstone River in between long streches of shifting sandbar habitat. Many large prairie rivers have been dammed affecting the substrate dynamics preffered by this globally uncommon and rare assemblage of insects dominated by mayflies (see also *Lachlania saskatchewanensis, Aneperous rusticus, Macdunnoa nipawinia, Homoeoneuria alleni*). This mayfly is also fairly unique among the order Ephemeroptera by being a predator, eating smaller insects, especially chironomid and blackfly larvae.

### Habitat .

This species is associated with larger, perennially flowing prairie streams and rivers with sand-gravel dominated bottoms with cobble riffles.

### **Species of Concern**

Global Rank: G4 State Rank: S2

## California Darner - Rhionaeschna californica

http://FieldGuide.mt.gov/detail\_IIODO14010.aspx



# 

### Number of Observations: 48

### Habitat

The California Darner prefers habitats like lakes, ponds, marshes and stream pools with edge vegetation including many with alkaline water conditions(Dunkle 2000, Paulson 2009).

### **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

## Blue-eyed Darner - Rhionaeschna multicolor

http://FieldGuide.mt.gov/detail\_IIODO14100.aspx



### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S4

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 34$ 

### Habitat

The habitat of Blue-eyed Darners includes lakes, ponds, marshes, and slow streams with edge vegetation, as well as acid bogs. This species can also tolerate alkaline water conditions (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

# A Mayfly - Rhithrogena robusta http://FieldGuide.mt.gov/detail\_IIEPH39170.aspx



Number of Observations: 0

Global Rank: G5 State Rank: SNR

# A Mayfly - Rhithrogena virilis http://FieldGuide.mt.gov/detail\_IIEPH39210.aspx



Number of Observations: 0

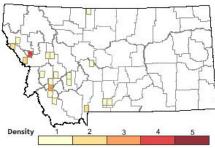
Global Rank: G3G4 State Rank: SNR

# A Rhyacophilan Caddisfly - Rhyacophila alberta http://FieldGuide.mt.gov/detail\_IITRI65960.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 27

## Alexander's Rhyacophilan Caddisfly - Rhyacophila alexanderi

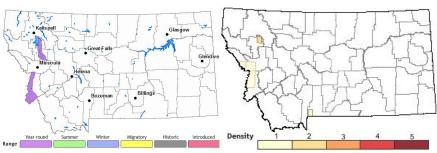
http://FieldGuide.mt.gov/detail\_IITRI19010.aspx



### **Species of Concern**

Global Rank: G2 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 4

### **General Description**

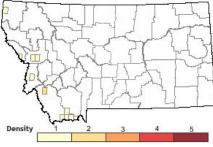
This cold-stenothermic caddisfly larvae is free-living without a case and moves actively around cobbles and boulders searching for food, usually preffering smaller insects, especially chironomids (midge larvae) and simulids (blackfly larvae) (Merritt and Cummins 1996). There is very little ecological information available on this species. According to Anderson (1976) species of this genus typically inhabit clear, cool creeks, and the known locations in MT fit this general description, including being steep gradient and forested.

### Habitat

There is very little ecological information available on this species. According to Anderson (1976) species of this genus typically inhabit clear, cool creeks, and the known locations in MT fit this general description, including being steep gradient and forested. These caddisfly larvae are free-living and that move actively searching for food (predatory) with no case, until just before pupation. The trophic relationship of Rhyachophila is usually predatory on other insects, especially chironomids (midge larvae) and simulids (blackfly larvae) (Merritt and Cummins 1996).

# A Rhyacophilan Caddisfly - Rhyacophila angelita http://FieldGuide.mt.gov/detail\_IITRI65970.aspx





Number of Observations: 10

A large variety of cold mountain streams and rivers.

Global Rank: G5 State Rank: SNR

# A Rhyacophilan Caddisfly - Rhyacophila belona <a href="http://FieldGuide.mt.gov/detail\_IITRI19470.aspx">http://FieldGuide.mt.gov/detail\_IITRI19470.aspx</a>



AGENCY STATUS USFWS: USFS: BLM:

Global Rank: G2G4 State Rank: SNR

Number of Observations: 0

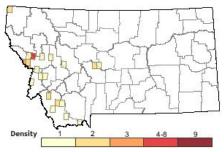
High alpine moraine creeks.

# A Caddisfly - Rhyacophila betteni http://FieldGuide.mt.gov/detail\_IITRI19480.aspx



Global Rank: G2G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 37

# A Rhyacophilan Caddisfly - Rhyacophila bifila http://FieldGuide.mt.gov/detail\_IITRI65990.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

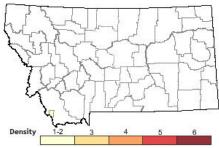
Number of Observations: 0

# A Rhyacophilan Caddisfly - Rhyacophila blarina http://FieldGuide.mt.gov/detail\_IITRI19490.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



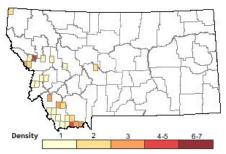
### Number of Observations: 2

# A Rhyacophilan Caddisfly - Rhyacophila brunnea <a href="http://FieldGuide.mt.gov/detail\_IITRI19980.aspx">http://FieldGuide.mt.gov/detail\_IITRI19980.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



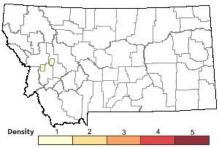
 $\textbf{Number of Observations} \colon 52$ 

# A Rhyacophilan Caddisfly - Rhyacophila coloradensis <a href="http://FieldGuide.mt.gov/detail\_IITRI66020.aspx">http://FieldGuide.mt.gov/detail\_IITRI66020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

# 

THE REPORT OF LARLY

Global Rank: G5T5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

## A Rhyacophilan Caddisfly - Rhyacophila donaldi

http://FieldGuide.mt.gov/detail\_IITRI19540.aspx



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



 $\textbf{Number of Observations} \colon 0$ 

### Habitat

R. donaldi is restricted to the northern Rocky Mountains, where it lives in cold alpine/subalpine streams fed by permanent snowmelt, glaciers or icefields. Giersch and Hauer (1999) reported this species from small, turbulent glacier creeks to tiny alpine trickles. Along with R. glaciera Denning, this species occurs in the highest, coldest streams in Glacier National Park. These caddisfly larvae are free-living forms that move actively searching for food (predatory) with no case, until just before pupation. The trophic relationships of larvae of Rhyachophila are predatory on other insects, especially chironomid midges and simulidae (blackfly larvae) (Merritt and Cummins 1996).

## A Rhyacophilan Caddisfly - Rhyacophila ebria

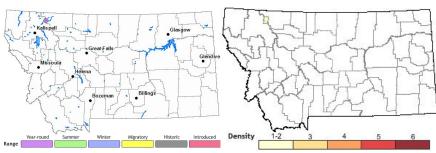
http://FieldGuide.mt.gov/detail\_IITRI19100.aspx



### **Species of Concern**

Global Rank: G2G3 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 2

### **General Description**

These caddisfly larvae are free-living forms that move actively around cobbles and boulders searching for food (predatory) without a case, until just before pupation. R. ebria is restricted to the northern Rocky Mountains, where it lives in cold alpine streams fed by permanent snowmelt, glaciers or icefields. Nimmo (1971) reported this species from small, turbulent creeks to tiny alpine trickles. Along with R. glaciera Denning, this species occurs in the highest, coldest streams in Glacier National Park. Joe Giersch (personal observation) has collected R. glaciera pupating and emerging simultaneously with R. alberta. The trophic relationships of larvae of Rhyachophila are predatory on other insects, especially chironomid midges and simulidae (blackfly larvae) (Merritt and Cummins 1996).

### Habitat

R. ebria is restricted to the northern Rocky Mountains, where it lives in cold alpine streams fed by permanent snowmelt, glaciers or icefields. Nimmo (1971) reported this species from small, turbulent creeks to tiny alpine trickles. Along with R. glaciera Denning, this species occurs in the highest, coldest streams in Glacier National Park. Joe Giersch (personal observation) has collected R. glaciera pupating and emerging simultaneously with R. alberta. These caddisfly larvae are free-living forms that move actively searching for food (predatory) with no case, until just before pupation. The trophic relationships of larvae of Rhyachophila are predatory on other insects, especially chironomid midges and simulidae (blackfly larvae) (Merritt and Cummins 1996).

# A Rhyacophilan Caddisfly - Rhyacophila ecosa http://FieldGuide.mt.gov/detail\_IITRI19550.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

## A Rhyacophilan Caddisfly - Rhyacophila gemona

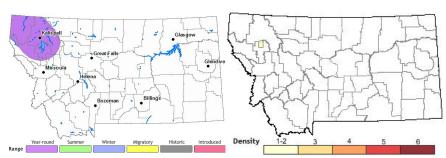
http://FieldGuide.mt.gov/detail\_IITRI19560.aspx



### **Species of Concern**

Global Rank: G2G3 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

### Habitat

This Rhyacophila species seems to prefer the small forested streams along the east side of Flathead Lake and potentially a few other similar streams in Lake and Sanders County. These steep-gradient, shaded, mossy cobble and woody rivulet streams fit the description of many habitats of our most narrowly restricted caddisflies.

## A Rhyacophilan Caddisfly - Rhyacophila glaciera

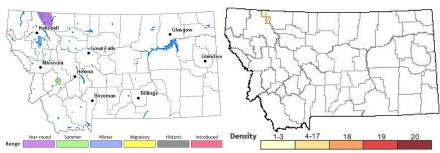
http://FieldGuide.mt.gov/detail\_IITRI19120.aspx



### **Species of Concern**

Global Rank: G3 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 20

### Habitat

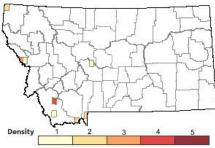
R. glaciera is isolated to the northern Rocky Mountains, where it lives in cold alpine streams fed by permanent snowmelt or icefields. Nimmo (1971) reported this species from small, turbulent creeks to tiny alpine trickles, Along with R. ebria Denning, this species occurs in the highest, coldest streams in Glacier National Park. This species has also been collected with R. glaciera pupating and emerging simultaneously with R. alberta (J. Giersch, personal observation).

# A Rhyacophilan Caddisfly - Rhyacophila hyalinata http://FieldGuide.mt.gov/detail\_IJTRI66430.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



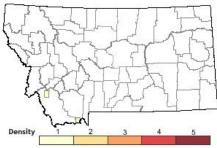
Number of Observations: 16

## A Caddisfly - Rhyacophila iranda http://FieldGuide.mt.gov/detail\_IITRI19600.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

## A Rhyacophilan Caddisfly - Rhyacophila kernada <a href="http://FieldGuide.mt.gov/detail\_IITRI19630.aspx">http://FieldGuide.mt.gov/detail\_IITRI19630.aspx</a>



Global Rank: G2G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

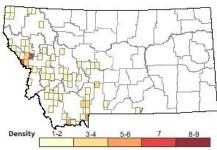
 $\textbf{Number of Observations} \colon 0$ 

# A Rhyacophilan Caddisfly - Rhyacophila narvae <a href="http://FieldGuide.mt.gov/detail\_IITRI66470.aspx">http://FieldGuide.mt.gov/detail\_IITRI66470.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### A Rhyacophilan Caddisfly - Rhyacophila newelli

http://FieldGuide.mt.gov/detail\_IITRI19110.aspx



# Density 2 3 4 5

#### Number of Observations: 1

#### **General Description**

Rhyacophila newelli is a free-living caddisfly (no case) that is a regional endemic only known to occur in Montana, Alberta & British Columbia (Wiggins 1996, NatureServe 2006). Distribution and ecological data for U.S. states and Canadian provinces is known to be incomplete or has not been reviewed for this taxon. Although, given it's locality information for Montana, this species like others in the angelita species group, prefer small, fast-flowing cold forested streams.

#### Habitat

This species is associated with high gradient, perennially flowing headwater springs and streams (Wiggins 1966). These caddisfly larvae are free-living and move actively searching for food (predatory) with no case, until just before pupation. The trophic relationship of Rhyachophila is usually predatory on other insects, especially chironomids (midge larvae) and simulids (blackfly larvae) (Merritt and Cummins 1996).

#### **Species of Concern**

Global Rank: G2 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:

## A Rhyacophilan Caddisfly - Rhyacophila nigrita http://FieldGuide.mt.gov/detail\_IITRI19220.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## A Rhyacophilan Caddisfly - Rhyacophila ophrys http://FieldGuide.mt.gov/detail\_IITRI19740.aspx



Global Rank: G1G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Rhyacophilan Caddisfly - Rhyacophila oreia

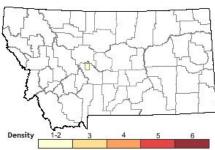
http://FieldGuide.mt.gov/detail\_IITRI19750.aspx



#### **Potential Species of Concern**

Global Rank: G1G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 2

#### **General Description**

Rhyacophila oreia is a free-living caddisfly (no case) that is a regional endemic only known from a limited area in Wyoming, Idaho and now Motnana. Ecological data for U.S. states and Canadian provinces is known to be incomplete or has not been reviewed for this taxon. Although, given it's locality information for Montana, this species like others in the oreia species group, prefer small, fast-flowing cold forested streams.

#### Habitat \_

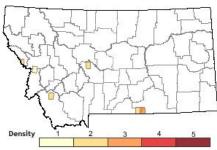
This Rhyacophila seems restricted to spring-influenced cold-forested, streams in the forested streams of western Montana

# A Rhyacophilan Caddisfly - Rhyacophila oreta http://FieldGuide.mt.gov/detail\_IITRI66490.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

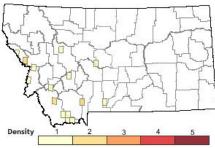


# A Rhyacophilan Caddisfly - Rhyacophila pellisa http://FieldGuide.mt.gov/detail\_IITRI66520.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### A Rhyacophilan Caddisfly - Rhyacophila potteri

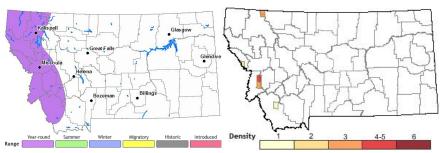
http://FieldGuide.mt.gov/detail\_IITRI19780.aspx



#### **Species of Concern**

Global Rank: G3 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 14$ 

#### **General Description**

Rhyacophila potteri is a caddisfly that may have evolved from an isolated population of the R. verrula group along the Montana/Idaho border and southern British Columbia and Alberta. Perhaps because of ecological constraints such as temperature, R. potteri could have been confined to its present distribution in cold, mossy springs and seeps after glaciation.

#### Habitat .

Collections of R. potteri have occurred at four localities in Montana, all of which are small streams or seeps with abundant mosses. This species is associated with moderate gradient, perennially flowing headwater springs and streams (Wiggins 1966).

### A Rhyacophilan Caddisfly - Rhyacophila rickeri

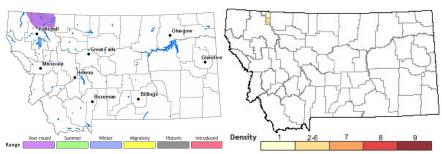
 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI19810.aspx}}$ 



#### **Species of Concern**

Global Rank: G3G4 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



#### Number of Observations: 7

#### Habitat

Adults of this species have been collected in July from high gradient first through fourth order streams on Baranof Island, Alaska (Ellis, 1978). Nimmo (1971) reported this species emerging in October near very small brooks flowing from moraines at high altitude (2,200 m), occasionally being collected directly from the snow. Giersch (2002) collected this species regularly from very cold, high alpine streams at Logan Pass in Glacier National Park.

## A Rhyacophilan Caddisfly - Rhyacophila robusta <a href="http://FieldGuide.mt.gov/detail\_IITRI19820.aspx">http://FieldGuide.mt.gov/detail\_IITRI19820.aspx</a>



Global Rank: G2G3 State Rank: SNR

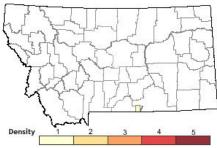
AGENCY STATUS USFWS: USFS: BLM:

# A Rhyacophilan Caddisfly - Rhyacophila rotunda http://FieldGuide.mt.gov/detail\_IITRI66540.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

## A Rhyacophilan Caddisfly - Rhyacophila tucula <a href="http://FieldGuide.mt.gov/detail\_IITRI66560.aspx">http://FieldGuide.mt.gov/detail\_IITRI66560.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

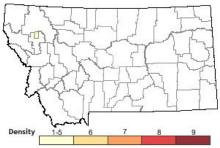
### A Rhyacophilan Caddisfly - Rhyacophila unimaculata

http://FieldGuide.mt.gov/detail\_IITRI19900.aspx



Global Rank: G2G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



#### $\textbf{Number of Observations} \colon 5$

#### Hahitat

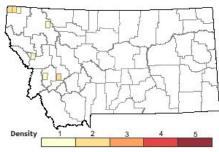
This Rhyacophila species seems to prefer the small forested streams along the east side of Flathead Lake and potentially a few other similar streams in Lake and Sanders County. These steep-gradient, shaded, mossy cobble and woody rivulet streams fit the description of many habitats of our most narrowly restricted caddisflies.

# A Rhyacophilan Caddisfly - Rhyacophila vaccua <a href="http://FieldGuide.mt.gov/detail\_IITRI66570.aspx">http://FieldGuide.mt.gov/detail\_IITRI66570.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

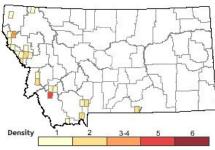


# A Rhyacophilan Caddisfly - Rhyacophila vagrita http://FieldGuide.mt.gov/detail\_IITRI66580.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## A Rhyacophilan Caddisfly - Rhyacophila valuma <a href="http://FieldGuide.mt.gov/detail\_IJTRI66590.aspx">http://FieldGuide.mt.gov/detail\_IJTRI66590.aspx</a>



Global Rank: G5 State Rank: SNR

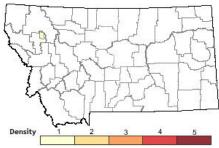
AGENCY STATUS USFWS: USFS: BLM:

# A Rhyacophilan Caddisfly - Rhyacophila vao <a href="http://FieldGuide.mt.gov/detail\_IITRI66610.aspx">http://FieldGuide.mt.gov/detail\_IITRI66610.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

## A Rhyacophilan Caddisfly - Rhyacophila vemna <a href="http://FieldGuide.mt.gov/detail\_IITRI66620.aspx">http://FieldGuide.mt.gov/detail\_IITRI66620.aspx</a>



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

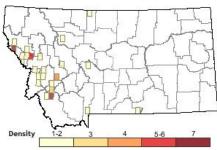
 $\textbf{Number of Observations} \colon 0$ 

# A Rhyacophilan Caddisfly - Rhyacophila verrula <a href="http://FieldGuide.mt.gov/detail\_IJTRI66630.aspx">http://FieldGuide.mt.gov/detail\_IJTRI66630.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

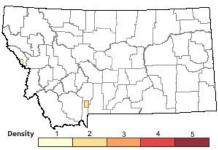


# A Rhyacophilan Caddisfly - Rhyacophila visor http://FieldGuide.mt.gov/detail\_IITRI19960.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## A Rhyacophilan Caddisfly - Rhyacophila vobara <a href="http://FieldGuide.mt.gov/detail\_IITRI66640.aspx">http://FieldGuide.mt.gov/detail\_IITRI66640.aspx</a>



Global Rank: G5 State Rank: SNR

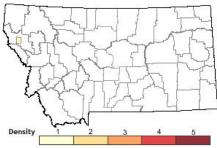
AGENCY STATUS USFWS: USFS: BLM:

# A Rhyacophilan Caddisfly - Rhyacophila vocala <a href="http://FieldGuide.mt.gov/detail\_IITR166650.aspx">http://FieldGuide.mt.gov/detail\_IITR166650.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



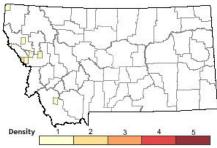
Number of Observations: 1

## A Caddisfly - Rhyacophila vofixa http://FieldGuide.mt.gov/detail\_IITRI66660.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 9

## A Rhyacophilan Caddisfly - Rhyacophila vuzana <a href="http://FieldGuide.mt.gov/detail\_IITRI66670.aspx">http://FieldGuide.mt.gov/detail\_IITRI66670.aspx</a>



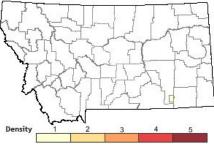
Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Noctuid Moth - Richia parentalis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IILEMTNHP2.aspx}}$ 





#### Number of Observations: 1

### **General Description**

The Richia parentalis adult has an extremely variable forewing color and pattern both in the basic ground color from light gray to dark gray, and in the amount of black that ranges from none to extensive in the median two-thirds (Powell and Opler, 2009).

#### Habitat .

Richia parentalis is found in ponderosa pine forests as well as pinyon-juniper forests (Powell and Opler, 2009).

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

## Palestripe Springfly - Rickera sorpta http://FieldGuide.mt.gov/detail\_IIPLE2K010.aspx

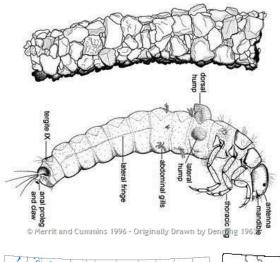


Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Northern Rocky Mountains Refugium Caddisfly - Rossiana montana

http://FieldGuide.mt.gov/detail\_IITRIF9010.aspx



# Kalis peti Glas gow Great Falls Bozoman Billings Historic Introduced Density 1 2 3 4 5

Number of Observations: 11

#### **General Description**

The larvae of the caddisfly, Rossiana montana occurs in high-gradient, 1st or 2nd order, perennially flowing, forested springs and streams (especially in gravel under mossy areas) of the Rocky Mountain Refugium Area (ID/MT boundary area). The ecological system this species is most closely associated with is referred to as the Northern Rocky Mountain Refugium Headwater Forested Streams. The small rock larval case of Rossiana makes it somewhat distinctive compared to other caddisfly families and only another rare caddisfly, Goeoriella (Rossianidae) should be confused with it while sampling in these areas.

#### Habitat

This species is associated with high-gradient, 1st or 2nd order, perennially flowing springs and streams, especially in gravel under mossy areas (Wiggins 1996).

#### **Species of Concern**

Global Rank: G2G3 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:

### A Cave Obligate Isopod - Salmasellus steganothrix <a href="http://FieldGuide.mt.gov/detail\_ICMAL84010.aspx">http://FieldGuide.mt.gov/detail\_ICMAL84010.aspx</a>



#### **Species of Concern**

Global Rank: G2G3 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



## Acadian Hairstreak - Satyrium acadica http://FieldGuide.mt.gov/detail\_IILEPD4030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

Range \_\_\_

## California Hairstreak - Satyrium californica http://FieldGuide.mt.gov/detail\_IILEPD4040.aspx



Global Rank: G5 State Rank: SNR

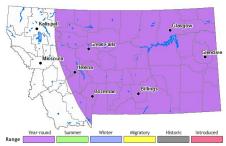
AGENCY STATUS USFWS: USFS: BLM:

## **Striped Hairstreak -** *Satyrium liparops*<a href="http://FieldGuide.mt.gov/detail\_IILEPD4100.aspx">http://FieldGuide.mt.gov/detail\_IILEPD4100.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



## Hedgerow Hairstreak - Satyrium saepium <a href="http://FieldGuide.mt.gov/detail\_IILEPD4130.aspx">http://FieldGuide.mt.gov/detail\_IILEPD4130.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



## Half-moon Hairstreak - Satyrium semiluna <a href="http://FieldGuide.mt.gov/detail\_IILEPD4024.aspx">http://FieldGuide.mt.gov/detail\_IILEPD4024.aspx</a>



Global Rank: G4 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

## **Sylvan Hairstreak - Satyrium sylvinus** <a href="http://FieldGuide.mt.gov/detail\_IILEPD4050.aspx">http://FieldGuide.mt.gov/detail\_IILEPD4050.aspx</a>



Global Rank: G5 State Rank: S4

AGENCY STATUS USFWS: USFS: BLM:

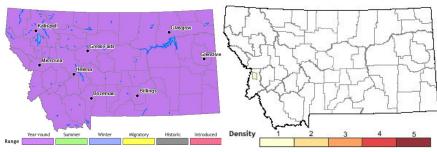


# Coral Hairstreak - Satyrium titus http://FieldGuide.mt.gov/detail\_IILEPD4140.aspx



Global Rank: G4G5 State Rank: S5

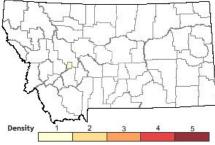
AGENCY STATUS USFWS: USFS: BLM:



### A Noctuid Moth - Schinia sueta

http://FieldGuide.mt.gov/detail\_IILEYMP060.aspx





Number of Observations: 1

Global Rank: G4 State Rank: SNR

### A Bark Beetle - Scierus annectens

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLZU010.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### A Bark Beetle - Scierus pubescens

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOLZU020.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### A Bark Beetle - Scolytus laricis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOL7F070.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - Scolytus monticolae http://FieldGuide.mt.gov/detail\_IICOL7F080.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Scolytus multistriatus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7F030.aspx">http://FieldGuide.mt.gov/detail\_IICOL7F030.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - Scolytus opacus http://FieldGuide.mt.gov/detail\_IICOL7F090.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - Scolytus piceae http://FieldGuide.mt.gov/detail\_IICOL7F040.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

# A Bark Beetle - *Scolytus rugulosus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7F060.aspx">http://FieldGuide.mt.gov/detail\_IICOL7F060.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### Banded Elm Bark Beetle - Scolytus schevyrewi

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOL7F100.aspx}}$ 



**Exotic Species** (not native to Montana)

Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - Scolytus subscaber http://FieldGuide.mt.gov/detail\_IICOL7F110.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### A Bark Beetle - Scolytus tsugae

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IICOL7F120.aspx}}$ 



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - *Scolytus unispinosus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7F130.aspx">http://FieldGuide.mt.gov/detail\_IICOL7F130.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Bark Beetle - Scolytus ventralis http://FieldGuide.mt.gov/detail\_IICOL7F140.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

# A Millipede - Scytonotus piger http://FieldGuide.mt.gov/detail\_ITUNI62020.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### Northern Rocky Mountains Refugium Caddisfly - Sericostriata surdickae

http://FieldGuide.mt.gov/detail\_IITRIG3010.aspx

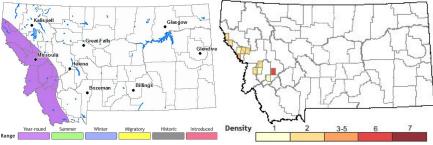


#### **Potential Species of Concern**

Global Rank: G3 State Rank: S3

AGENCY STATUS USFWS: USFS:

BLM:



**Number of Observations**: 26

The larvae of the caddisfly, S. surdickae occur on the upper surfaces of rockfaces and boulders in high gradient, perennially flowing, cold mountain streams of the Rocky Mountain Refugium Area (ID/MT boundary area). The transverse banding and longitudinal ridges of the larval case of Sericostriata makes it very distinctlive.

#### Habitat

The larvae of S. surdickae occur on the upper surfaces of rocks in high gradient, perennially flowing, cold mountain streams (Wiggins1996, see photo). The trophic relationship of Sericostriata larvae include scrapers and collectors-gatherers (detritus, diatoms) (Merritt and Cummins 1996).

# A Mayfly - Serratella deficiens http://FieldGuide.mt.gov/detail\_IIEPH10030.aspx



Global Rank: G5 State Rank: SNR

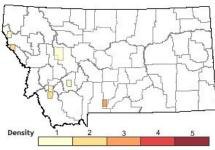
AGENCY STATUS USFWS: USFS: BLM:

# A Mayfly - Serratella micheneri http://FieldGuide.mt.gov/detail\_IIEPH10090.aspx



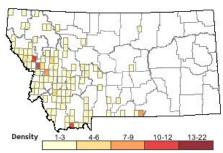
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



# A Mayfly - Serratella tibialis http://FieldGuide.mt.gov/detail\_IIEPH10130.aspx





Number of Observations: 250

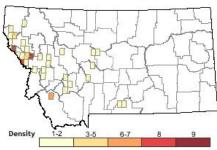
Global Rank: G5 State Rank: SNR

# Alberta Springfly - Setvena bradleyi http://FieldGuide.mt.gov/detail\_IIPLE2A010.aspx



Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### An Alderfly - Sialis hamata

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IINEU01030.aspx}}$ 



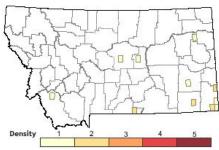
Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# An Alderfly - Sialis velata http://FieldGuide.mt.gov/detail\_IINEU01040.aspx



Global Rank: GNR State Rank: SNR

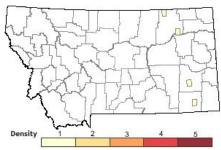


Number of Observations: 15

# A Water Boatman - Sigara alternata http://FieldGuide.mt.gov/detail\_IIHEM04120.aspx



Global Rank: GNR State Rank: SNR



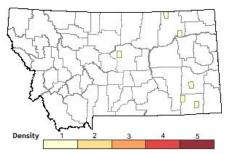
Number of Observations: 4

# A Water Boatman - Sigara grossolineata http://FieldGuide.mt.gov/detail\_IIHEM04160.aspx



Global Rank: GNR State Rank: SNR

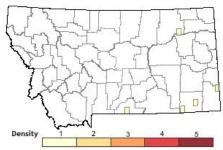
AGENCY STATUS USFWS: USFS: BLM:



# A Water Boatman - Sigara lineata http://FieldGuide.mt.gov/detail\_IIHEM04030.aspx



Global Rank: GNR State Rank: SNR

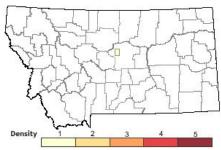


Number of Observations: 5

# A Water Boatman - Sigara mathesoni http://FieldGuide.mt.gov/detail\_IIHEM04010.aspx



Global Rank: GNR State Rank: SNR



Number of Observations: 1

# A Mayfly - Siphlonurus autumnalis http://FieldGuide.mt.gov/detail\_IIEPH24110.aspx



Global Rank: G2G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

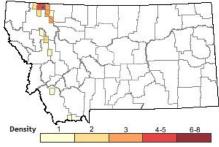
Number of Observations: 0

Habitat .

This species has been taken from rocky but somewhat quiet edgewaters along relatively large rivers in the Northwest (Jacobus and McCafferty, 2002)

### A Siphlonurid Mayfly - Siphlonurus occidentalis <a href="http://FieldGuide.mt.gov/detail\_IIEPH24010.aspx">http://FieldGuide.mt.gov/detail\_IIEPH24010.aspx</a>





Number of Observations: 33

This species has been collected from rocky but somewhat quiet organic rich edgewaters along relatively medium to large rivers in the montain western part of Montana.

Global Rank: G5 State Rank: SNR

### A Siphlonurid Mayfly - Siphlonurus phyllis

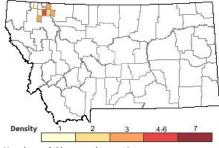
http://FieldGuide.mt.gov/detail\_IIEPH24080.aspx



State Rank: SNR

AGENCY STATUS
USFWS:
USFS:
BLM:

Global Rank: G3G4



Number of Observations : 19

#### **General Description**

This is a large, swimming mayfly capable of surviving in ponds and wetlands without flowing water. It occurs in western Montana in numerous ponds and wetlands around the West Glacier area, Glacier National Park, Flathead Co.; habitat also listed as ponds and beaver ponds in Glacier Co. (McCafferty and Newell, 2007).

#### Habitat

Emergent wetlands: all had organic substrates with extensive emergent vegetation (mostly sedges). Some sites were temporary, but others were permanent beaver ponds. S. phyllis sites were scattered around the park but were limited to valleys (Hossack pers. comm 2010)

# A Sand Minnow Mayfly - Siphloplecton interlineatum <a href="http://FieldGuide.mt.gov/detail\_IIEPH21010.aspx">http://FieldGuide.mt.gov/detail\_IIEPH21010.aspx</a>



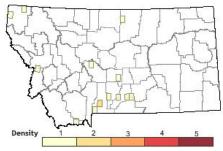
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### American Springfly - Skwala americana

http://FieldGuide.mt.gov/detail\_IIPLE2B010.aspx





Number of Observations: 14

#### **General Description**

The Skwala is a colorful stonefly nymph that hatches in early spring when not many other insects are hatching, making it the first large, post-winter meal for trout, and good fishing for fisherman. The Skwala hatch begins as river waters begin to warm, usually the end of February, which provides a pre-runoff fishing opportunity. The Bitterroot River has become a favorite river for the skwala hatch, but many other large Montana rivers such as the Clark Fork River, Blackfoot, Smith, Yellowstone and Madison Rivers contains these insects in large enough numbers to make fishing the hatch worthwhile.

Global Rank: G5 State Rank: SNR

# Curved Springfly - Skwala curvata http://FieldGuide.mt.gov/detail\_IIPLE2B020.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### One-eyed Sphinx Moth - Smerinthus cerisyi

http://FieldGuide.mt.gov/detail\_IILEX0F020.aspx



Global Rank: G4G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

#### **General Description**

The One-eyed Sphinx Moth (Smerinthus cerisyi) is a large (62 - 90 mm wingspan) heavy-bodied sphinx moth. The forewings are pale grey (occasionally tan) with a rather complex pattern of darker grey and black banding. The median and terminal areas in particular are dark. The outer margin of the forewing is scalloped, with a "tooth" at the anal angle. The hindwings are bright rose-pink, shading into tan toward the margin. There is a large black spot in the anal angle containing a bright blue circle, often incomplete and sometimes with a second blue crescent above. The thorax is black, contrasting sharply with the broad pale grey tegulae (Anweiler and Robinson no date).

#### Habitat .

Valleys and streamsides (Opler et al. 2010).

### Clearwater Roachfly - Soliperla salish

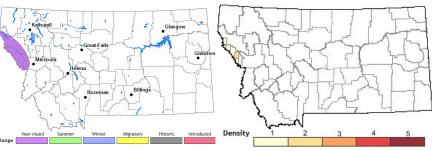
http://FieldGuide.mt.gov/detail\_IIPLE1G070.aspx



#### **Species of Concern**

Global Rank: G2 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



#### $\textbf{Number of Observations} \colon 5$

#### General Description

This stonefly is a regional endemic to the Northern Rocky Mountain refugium region centered on the Montana/Idaho border. This species was not collected in Montana before 2001 due to its presence in very small high elevation streams.

#### Habitat

This species occurs in small high gradient creeks and streams near their headwaters source (Stark and Gustafson 2004). Nymphs were found on vertically oriented clean boulders in splash zones or seeping water, but not on the adjacent mossy covered cobbles. Merritt and Cummins (1996) describe Soliperla trophic relationships as shredders and collectors-gatherers (detritus, algae), and Stark and Gustafson (2004) reported shredded organic debris (leaves and wood) in the gut contents they examined.

### Ringed Emerald - Somatochlora albicincta

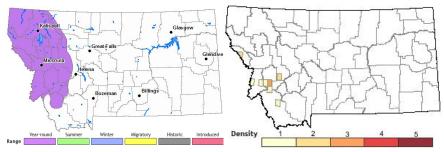
http://FieldGuide.mt.gov/detail\_IIODO32010.aspx



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 12

#### **General Description**

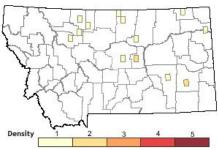
This emerald of northern states and western Montana is rarely seen and very few records have been reported. Very little is known of the ecology, abundance or distribution of this species in Montana, therefore we placed it on the PSOC list. The habitat of the Ringed Emerald includes lakes of all sizes, often with little vegetation, including and boggy and fen ponds, as well as slow-flowing streams.

The habitat of the Ringed Emerald includes lakes of all sizes, often with little vegetation, including and boggy and fen ponds, as well as slow-flowing streams (Dunkle 2000, Paulson 2009).

# Plains Emerald - Somatochlora ensigera

http://FieldGuide.mt.gov/detail\_IIODO32060.aspx





## Number of Observations: 15

General Description

A conspicuously marked species, easily known by its almost entirely yellow face, the peculiar shape of the anal appendages of the male, and the very short anal appendages of the female, together with a long projecting vulvar lamina (Walker and Corbett, 1975). Length 48-51 mm.; abdomen 35-38; hind wing 33-35. An inland species of medium size and well-defined markings. Orange labrum with black front border and median basal spot. Frons has a broad cap of metallic blue green; its side spots of yellow narrow forward to meet or nearly meet on middle line in front. Occiput shining brown. Thorax scantily hairy. Side stripes of thorax and of abdominal segment 2 bright yellow, bordered by black. Thorax dark reddish brown in front, with yellow carina; it becomes bluish toward crest and between yellow stripes on sides. Wings hyaline, touched with amber yellow at extreme base. Costa ochre yellow; stigma blackish; veins brown. Abdomen brown, much swollen on segment 2; two large antero-lateral spots, in male a smaller postero-lateral spot runs down and half covers genital lobe. Of two usual elongate lateral triangles on segment 3, lower one is much longer. Remainder of abdomen and caudal appendages black. This species nearly like linearis but smaller and more brightly marked with yellow. Caudal appendages of male more slender and more nearly parallel in their apical third. Ovipositor of female longer, straighter, more slender (Needham and Westfall, 1955).

### Habitat

The Plains Emerald prefers habitats of streams, small rivers, and ditches with pools and riffles in open areas (Dunkle 2000, Paulson 2009).

Global Rank: G4 State Rank: S4

# Hudsonian Emerald - Somatochlora hudsonica

http://FieldGuide.mt.gov/detail\_IIODO32120.aspx



## Number of Observations: 3

# Habitat

Hudsonian Emeralds prefer sedge-bordered lakes, ponds and marshes, boggy slow streams with pools, lake inlets, as well as ditches and sloughs (Dunkle 2000, Paulson 2009).

**Potential Species of Concern** 

Global Rank: G5 State Rank: S2S4

# Ocellated Emerald - Somatochlora minor

http://FieldGuide.mt.gov/detail\_IIODO32170.aspx



## Number of Observations: 9

The Ocellated Emerald prefers clear, small to medium, flowing forest streams without emergent vegetation as habitat, especially stream pools and areas where streams leave the forest and open into meadows (Dunkle 2000, Paulson 2009).

## **Potential Species of Concern**

Global Rank: G5 State Rank: S2S4

# Mountain Emerald - Somatochlora semicircularis

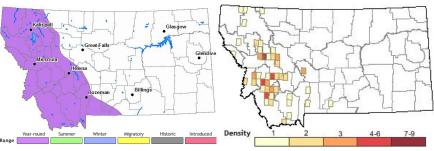
http://FieldGuide.mt.gov/detail\_IIODO32210.aspx



## **Potential Species of Concern**

Global Rank: G5 State Rank: S3S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 90$ 

The preferred habitat of the Mountain Emerald includes ponds, marshes, fens, bogs and swamps, as well as wet meadows associated with small streams. This species tends to avoid lakes unless an extensive sedge margin is present (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

# Brush-tipped Emerald - Somatochlora walshii

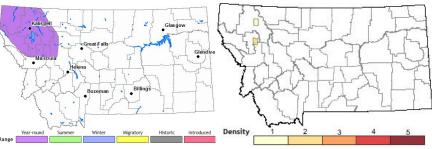
http://FieldGuide.mt.gov/detail\_IIODO32240.aspx



## **Species of Concern**

Global Rank: G5 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 3

## Habitat

The habitat preference for the Brush-tipped Emerald includes small, slow-flowing streams that flow through open bogs, sedge fens, marshes, and meadows. This species can also be found at lake or pond outlets (Dunkle 2000, Paulson 2009).

# Whitehouse's Emerald - Somatochlora whitehousei

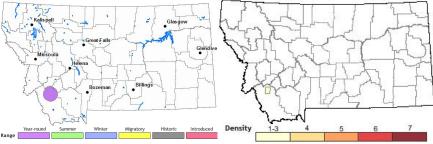
http://FieldGuide.mt.gov/detail\_IIODO32250.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## Number of Observations: 3

## **General Description**

Somatochlora whitehousei is a small, dark species with a dark-brown triangular patch at the base of the hindwing, and a black face with yellow on the sides (Bryan 2008), distributed across Canada and known from only two sites in the US (Washington and Montana). Although generally uncommon, it is found in small to moderate-sized ponds and bogs with abundant vegetation (mosses, sedges, buckbean, and algae). Like other members of its genus, habitat disturbance and alteration are the greatest immediate threats to this species. Specific activities that alter fen habitat include peat mining, wetland grazing, manipulation of water levels, and recreation. Continued protection and management of bog/fen habitat is essential to the preservation of this ecologically unique species.

### Habitat

The Whitehouse's Emerald prefers sedge fens, small boggy pools and open ponds with abundant sedge vegetation having clear water and soft muddy bottom as breeding habitat (Dunkle 2000, Paulson 2009).

# Northern Rocky Mountains Refugium Stonefly - Soyedina potteri

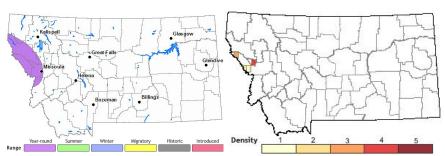
http://FieldGuide.mt.gov/detail\_IIPLE0S040.aspx



### **Species of Concern**

Global Rank: G2 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 10$ 

### **General Description**

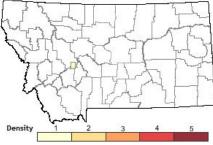
See Diagnostic Characteristics.

### Habitat

This species occurs in creeks, small streams, and small springs (Baumann et al. 1977; NatureServe 2006). Merritt and Cummins (1996) describe the habitat associated with members of the genus Soyedina as "spring outflows." The morphology of the mouthparts suggests that Soyedina is well-suited for biting or shredding, thus its trophic relationships would include shredders and collectors-gatherers (detritus, algae) (Merritt and Cummins 1996).

# Lorquin's Angle - Speranza lorquinaria http://FieldGuide.mt.gov/detail\_IILEU0C020.aspx





Number of Observations:  ${\bf 1}$ 

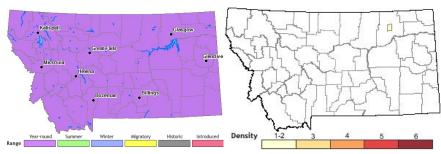
Global Rank: G5 State Rank: SNR

# Aphrodite Fritillary - Speyeria aphrodite <a href="http://FieldGuide.mt.gov/detail\_IILEPJ6030.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ6030.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



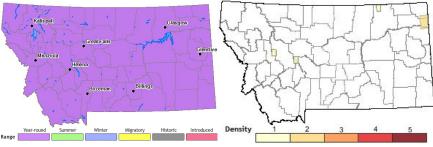
Number of Observations: 2

# Callippe Fritillary - Speyeria callippe <a href="http://FieldGuide.mt.gov/detail\_IILEPJ6090.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ6090.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 5$ 

## **General Description**

The upperside of the Callippe Fritillary (Speyeria callippe) is tawny to bright red-brown with dark, evenly-spaced markings. The underside has triangular silver submarginal spots with a narrow brown edging. The other spots are large and usually silvered. The wing span is 50 - 64 mm (Opler et al. 2010).

### Habitat .

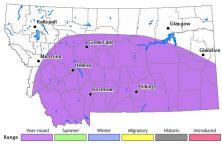
Sagebrush, chaparral, dry woodland, prairie hills (Opler et al. 2010).

# Coronis Fritillary - Speyeria coronis http://FieldGuide.mt.gov/detail\_IILEPJ6070.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 0

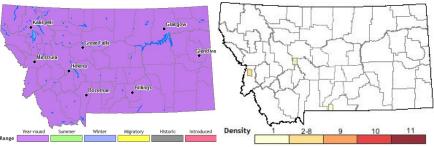
# Great Spangled Fritillary - Speyeria cybele

http://FieldGuide.mt.gov/detail\_IILEPJ6020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 10$ 

## **General Description**

The upperside of the male Great Spangled Fritillary (*Speyeria cybele*) is tan to orange with black scales on forewing veins. The female is tawny, and darker than the male. The underside of the hindwing has a wide pale submarginal band and large silver spots. The wing span is about 63 - 101 mm (Opler et al. 2010).

### Habitat

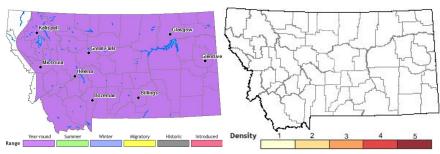
Open, moist places including fields, valleys, pastures, right-of-ways, meadows, open woodland, and prairies (Opler et al. 2010).

# Edwards' Fritillary - Speyeria edwardsii http://FieldGuide.mt.gov/detail\_IILEPJ6060.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 1

# Great Basin Fritillary - Speyeria egleis <a href="http://FieldGuide.mt.gov/detail\_IILEPJ6100.aspx">http://FieldGuide.mt.gov/detail\_IILEPJ6100.aspx</a>



Global Rank: G5 State Rank: S5

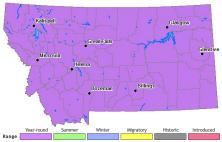
AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

# Northwestern Fritillary - Speyeria hesperis http://FieldGuide.mt.gov/detail\_IILEPJ6160.aspx





Number of Observations: 0

Global Rank: G5 State Rank: S5

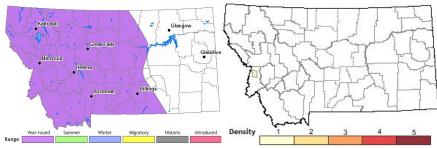
# Hydaspe Fritillary - Speyeria hydaspe

http://FieldGuide.mt.gov/detail\_IILEPJ6120.aspx



Global Rank: G4G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 1

### **General Description**

The Hydaspe Frittillary inhabitats moist meadows and forest openings in Montana and Rocky Mountain States to the Pacific Ranges. The upperside wing is orange-brown with dark bases and heavy dark markings. Underside light brown to dark maroon with violet tinge. Hindwing submarginal band slightly paler than rest of wing; spots cream-colored, bordered with black, and may or may not be silvered.

## Habitat \_

Moist forest openings and mountain meadows (Opler et al 1999).

# Regal Fritillary - Speyeria idalia

http://FieldGuide.mt.gov/detail\_IILEPJ6040.aspx



Global Rank: G3 State Rank: SNA

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

See any butterfly book for eastern or central North America. Adult large, size of a Monarch. Upper side with reddish-orange forewings and velvety blackish hindwings with blue greenish brown with many elongate whitish spots, no pale subterminal band. Habitat of the regal fritillary is tall- grass prairie and other open, sunny locations, including meadows, marshes, and mountain pastures. Larval hostplants are violets. A wide range of violets are used, including birdfoot violet (Viola pedata) and prairie violet (Viola pedatifida) in the western parts of its range.

### Habitat

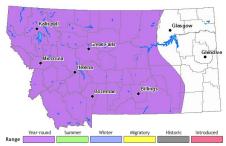
Tall-grass prairie and other open sites including damp meadows, marshes, wet fields, and mountain pastures.

# Mormon Fritillary - Speyeria mormonia http://FieldGuide.mt.gov/detail\_IILEPJ6130.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 0$ 

 $\label{thm:meadows} \mbox{ Mountain meadows and fell-fields, moist prairie valleys, subarctic forest openings.}$ 

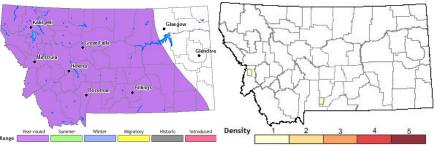
# Zerene Fritillary - Speyeria zerene

http://FieldGuide.mt.gov/detail\_IILEPJ6080.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 2

## **General Description**

The upper surface of both wings of the Zerene Fritillary (Speyeria zerene) are tawny to red-brown with dark markings. The underside of hindwing has silvered or unsilvered marginal spots more triangular than those of the Coronis Fritillary (Speyeria coronis). The wing span is 54 - 70 mm (Opler et al. 2010).

## Habitat \_

 $\label{lem:constal} \mbox{Conifer forests, sagebrush, coastal meadows and dunes (Poole no date)}.$ 

# River Fingernailclam - Sphaerium fabale

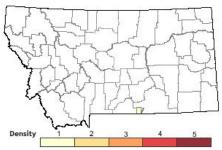
http://FieldGuide.mt.gov/detail\_IMBIV52020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## Number of Observations: 1

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

The species is found in creeks and small rivers on "coarse gravel or in gravelly sand." Most records indicate it is found in protected slow moving waters (La Rocque 1967:314). Clarke (1981:364) states the species is found in rivers and streams and does not occur in lakes. It is found in gravel and in "gravelly sand in cracks in a limestone bottom."

# Arctic Fingernailclam - Sphaerium nitidum

http://FieldGuide.mt.gov/detail\_IMBIV52030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## Number of Observations: 1

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

### Habitat

Because the species requires cold water, it is only found at northern latitudes, in deep water, or at high altitudes. Has been collected in several large northern rivers and northern lakes (La Rocque 1967:293). Clarke (1981:366) indicates this is an arctic and alpine species that occurs in small and large lakes and in rivers of various widths, on diverse substrates.

# Herrington Fingernailclam - Sphaerium occidentale

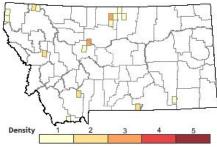
http://FieldGuide.mt.gov/detail\_IMBIV52040.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



### Number of Observations: 24

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat

The species can be found in a wide range of habitats, including: ponds, ditches, swamps, among grass and leaves, flood plains, and lagoons. Although most records indicate the species prefers, or requires, "a habitat that dries up for part of the year", some records indicate it may also be found in more permanent bodies of water (La Rocque 1967:288-289). Clarke (1981:376) indicates the species is "restricted to water bodies that dry up for a part of each year. Typical sites are ditches, swamps, and small shallow ponds, but also occurs among damp leaves. More amphibious than any other North American bivalve mollusc."

# Rocky Mountain Fingernailclam - Sphaerium patella

http://FieldGuide.mt.gov/detail\_IMBIV52050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

Number of Observations: 0

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

### Habitat .

The species occurs in lakes, rivers, sloughs, and streams. Details of substrate preference have not been recorded. (Clarke 1981:368).

# Rhomboid Fingernailclam - Sphaerium rhomboideum

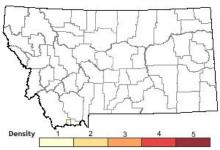
http://FieldGuide.mt.gov/detail\_IMBIV52060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



## Number of Observations: 1

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

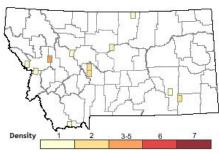
## Habitat .

The species is found in ponds, eddies in creeks and rivers, and sheltered areas in small lakes. Seems to have a preference for muddy bottoms among weeds and algae. It has been collected in mud, gravel and coarse sand bottoms; at depths of 0.3 to 2 m (La Rocque 1967:300). Clarke (1981:370) indicates the species occurs in ponds, lakes, and streams; among vegetation in quiet water; and most frequently on muddy bottoms.

# Grooved Fingernailclam - Sphaerium simile

http://FieldGuide.mt.gov/detail\_IMBIV52070.aspx





### Number of Observations: 18

## **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat

"The confusion between S. SIMILE and S. SULCATUM makes it difficult, if not impossible, to say just what the habitat" of the species might be. The type cited came from the Delaware River (La Rocque 1967:305). Clarke (1981:372) indicates the species is common and "occurs in all kinds of perennial-water habitats that contain submersed vegetation and muddy or sandy bottoms."

Global Rank: G5 State Rank: SNR

# Striated Fingernailclam - Sphaerium striatinum

http://FieldGuide.mt.gov/detail\_IMBIV52080.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

### Habitat .

The species is found in a variety of habitats, including small lakes, rivers, creeks, trenches, canals, and sandy shoals. It has not been found in ponds, lagoons, bog ponds, swamps or other stagnant water, one source suggests that these habitats do not have sufficient current to oxygenate the water. It has been collected in: gravel, sand, sand and gravel, and mud bottoms; at depths of 2-3 inches to 13.5 m. (La Rocque 1967:307). Clarke (1981:374) indicates the species is common and occurs "principally in rivers and streams, but also occurs in large lakes and rarely, in small lakes. Does not occur in swamps, stagnant water, or temporary-water habitats."

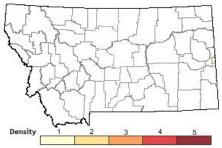
# A Peaclam - Sphaerium sulcatum

http://FieldGuide.mt.gov/detail\_IMBIV52090.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## ${\bf Number\ of\ Observations}\colon 1$

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

## Habitat .

The species is found in small lakes and eddies of rivers and creeks, and is never found in swamps and ponds. It has a preference for soft bottoms in still waters and is often associated with PISIDIUM COMPRESSUM. "Much that has been written on the ecology of this species appears under S. SIMILE (Say)." It has also been collected in lakes filling up with marl (La Rocque 1967:303).

# A Peaclam - Sphaerium tenue

http://FieldGuide.mt.gov/detail\_IMBIV52100.aspx



Global Rank: GNR State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

Fingernail clams are small "mostly about the size of a finger or thumbnail" bottom-dwelling, filter-feeders found in ponds, lakes and streams throughout Montana. They are native and can be quite abundant, providing food for a variety of animals and producing large accumulations of empty shells. These shells can be quite fragile compared to introduced Asian clams of the family Corbiculidae, which have not been reported in Montana, yet.

# A Caddisfly - Stactobiella delira

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI99020.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

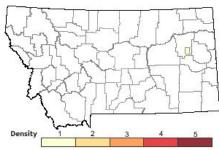
## $\textbf{Number of Observations} \colon 0$

Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.

# Abbreviate Pondsnail - Stagnicola apicina <a href="http://FieldGuide.mt.gov/detail\_IMGASL5010.aspx">http://FieldGuide.mt.gov/detail\_IMGASL5010.aspx</a>



Global Rank: G5 State Rank: SNR

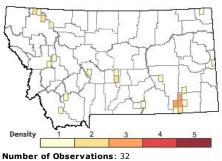


Number of Observations: 1

# Wrinkled Marshsnail - Stagnicola caperata http://FieldGuide.mt.gov/detail\_IMGASL5040.aspx



Global Rank: G5 State Rank: SNR



# Woodland Pondsnail - Stagnicola catascopium <a href="http://FieldGuide.mt.gov/detail\_IMGASL5050.aspx">http://FieldGuide.mt.gov/detail\_IMGASL5050.aspx</a>



Number of Observations: 0

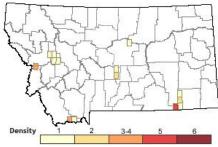
Global Rank: G5 State Rank: SNR

# Marsh Pondsnail - Stagnicola elodes http://FieldGuide.mt.gov/detail\_IMGASL5070.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 26

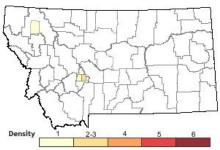
# Flathead Pondsnail - Stagnicola elrodi

http://FieldGuide.mt.gov/detail\_IMGASL5080.aspx



Global Rank: G1Q State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



# $\textbf{Number of Observations} \colon 5$

This species occurs in vegetated bays of Flathead Lake. Aquatic vegetation and algae are generally abundant at occupied sites. Most Lymnaeidae snails are scrapers of algae and other plant materials.

# Largemouth Pondsnail - Stagnicola elrodiana

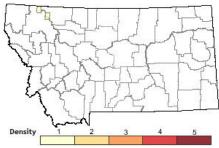
http://FieldGuide.mt.gov/detail\_IMGASL5090.aspx



Global Rank: G1Q State Rank: S1

AGENCY STATUS USFWS: USFS:

BLM:



# Number of Observations: 2

This species occurs in coldwater alpine-type lakes on cobbles. This species is not found in areas with mud, and large amounts of vegetation (Frest 1999). Most Lymnaeidae snails are scrapers of algae and other plant materials.

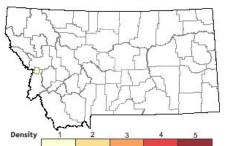
# Mountain Marshsnail - Stagnicola montanensis

http://FieldGuide.mt.gov/detail\_IMGASL5160.aspx



Global Rank: G3 State Rank: S1S3

AGENCY STATUS USFWS: USFS: BLM:



# $\ \, \textbf{Number of Observations} \colon 1 \\$

### Habitat

This species occurs in small coldwater rivers or spring-fed tributaries to larger river systems. Aquatic vegetation and algae are generally absent from occupied sites. This species is not found in areas with mud, sand, or bedrock (Frest 1999). Since "[i]t is a pure-water snail", any degradation of water quality where it occurs, such as erosional runoff from road or other construction producing turbidity or siltation, would be a threat since "it is never found in ... muddy water bodies" (Taylor et al. 1963). Most Lymnaeidae snails are scrapers of algae and other plant materials.

# Widelip Pondsnail - Stagnicola traski http://FieldGuide.mt.gov/detail\_IMGASL5210.aspx



Global Rank: G3 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

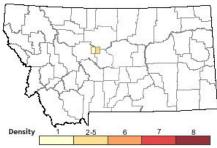
## A Nearctic Riffle Beetle - Stenelmis occidentalis

http://FieldGuide.mt.gov/detail\_IICOL5F050.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

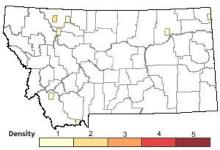


# Spinytail Fairy Shrimp - Streptocephalus sealii <a href="http://FieldGuide.mt.gov/detail\_ICBRA07020.aspx">http://FieldGuide.mt.gov/detail\_ICBRA07020.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 9$ 

## **General Description**

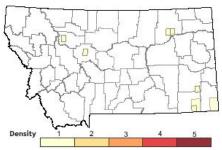
The proximal tooth of the second antenna has a single cusp. Fitzpatrick (1983) includes a key to the family and at least two illustrations of S. SEALI.

# **Greater Plains Fairy Shrimp -** *Streptocephalus texanus*<a href="http://FieldGuide.mt.gov/detail\_ICBRA07100.aspx">http://FieldGuide.mt.gov/detail\_ICBRA07100.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

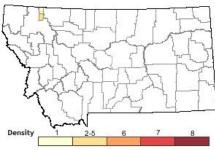


# Northwest Striate - *Striatura pugetensis* http://FieldGuide.mt.gov/detail\_IMGAS81050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

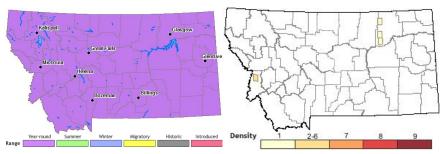


# **Gray Hairstreak -** *Strymon melinus*<a href="http://FieldGuide.mt.gov/detail\_IILEPF2010.aspx">http://FieldGuide.mt.gov/detail\_IILEPF2010.aspx</a>



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



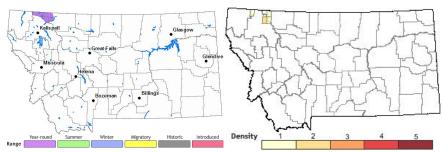
# Glacier Amphipod - Stygobromus glacialis http://FieldGuide.mt.gov/detail\_ICMAL05E50.aspx



## **Species of Concern**

Global Rank: G1G3 State Rank: S1S2





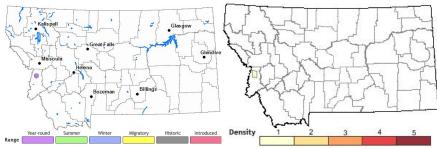
## A Subterranean Amphipod - Stygobromus montanensis <a href="http://FieldGuide.mt.gov/detail\_ICMAL05990.aspx">http://FieldGuide.mt.gov/detail\_ICMAL05990.aspx</a>



## **Species of Concern**

Global Rank: G1G2 State Rank: S1S2





Number of Observations:  ${\bf 1}$ 

## A Subterranean Amphipod - Stygobromus obscurus <a href="http://FieldGuide.mt.gov/detail\_ICMAL05A10.aspx">http://FieldGuide.mt.gov/detail\_ICMAL05A10.aspx</a>



## **Species of Concern**

Global Rank: G1G2 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations:  ${\bf 1}$ 

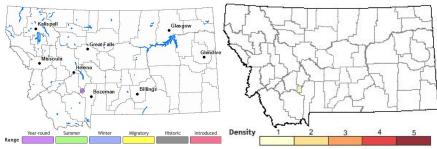
# A Subterranean Amphipod - Stygobromus puteanus <a href="http://FieldGuide.mt.gov/detail\_ICMAL05A30.aspx">http://FieldGuide.mt.gov/detail\_ICMAL05A30.aspx</a>



## **Species of Concern**

Global Rank: G1G2 State Rank: S1S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations:  ${\bf 1}$ 

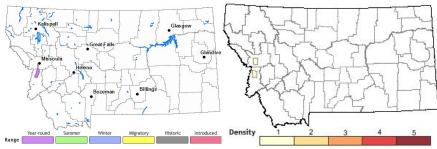
# A Subterranean Amphipod - Stygobromus tritus <a href="http://FieldGuide.mt.gov/detail\_ICMAL05A80.aspx">http://FieldGuide.mt.gov/detail\_ICMAL05A80.aspx</a>



## **Species of Concern**

Global Rank: G1G2 State Rank: S1S2





## Brimstone Clubtail - Stylurus intricatus

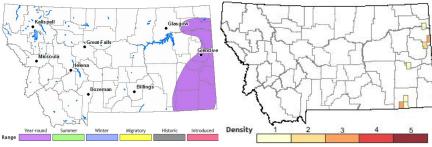
http://FieldGuide.mt.gov/detail\_IIODO80020.aspx



### **Species of Concern**

Global Rank: G4 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 12

### **General Description**

This pale clubtail is rare in sandy-bottomed prairie rivers of the arid west. It probably reaches the northern distribution in Alberta and in Montana only inhabitats the Powder River and lower Yellowstone and Missouri. This is a very pale clubtail with pale shins. The thorax is more pale than dark and mostly yellow-green.

#### Habitat

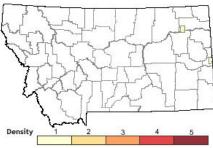
The habitat of the Brimstone Clubtail includes slow-moving, sand-bottomed, warm muddy rivers in open country, occasionally irrigation canals as well (Dunkle 2000, Paulson 2009).

# Santa Rita Ambersnail - Succinea grosvenori http://FieldGuide.mt.gov/detail\_IMGAS68080.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

# A Mayfly - Susperatus prudens http://FieldGuide.mt.gov/detail\_IIEPH09020.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 15

Density

## Autumn Sallfly - Suwallia autumna

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIPLE18010.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

## Pale Sallfly - Suwallia dubia

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIPLE18020.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

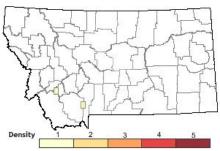
### $\textbf{Number of Observations} \colon 0$

### **General Description**

## Forceps Sallfly - Suwallia forcipata

http://FieldGuide.mt.gov/detail\_IIPLE18080.aspx





## Number of Observations: 2

## **General Description**

Nymphs and adults within the Chloroperliidae are small green and yellow stoneflies. Known to fly-fisherman as "little yellows", "little greens" and "Yellow Sallies". This family is well represented in Montana with 26 species, one of the larger families in the order Plecoptera, containing some 100 species distributed throughout the Holarctic region of North America. The adults are emerging in late spring and throughout summer.

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

## Lined Sallfly - Suwallia lineosa

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIPLE18030.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### **General Description**

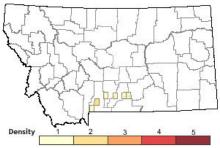
## Yellow Sallfly - Suwallia pallidula

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIPLE18050.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 7

### **General Description**

## A Stonefly - Suwallia salish

http://FieldGuide.mt.gov/detail\_IIPLE18110.aspx



Global Rank: G1 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

## Alberta Sallfly - Sweltsa albertensis

http://FieldGuide.mt.gov/detail\_IIPLE19020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### **General Description**

## Boreal Sallfly - Sweltsa borealis

http://FieldGuide.mt.gov/detail\_IIPLE19030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

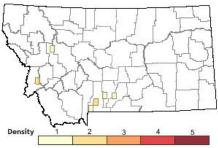
## Colorado Sallfly - Sweltsa coloradensis

http://FieldGuide.mt.gov/detail\_IIPLE19050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



## Number of Observations: 8

### **General Description**

## Mountain Sallfly - Sweltsa fidelis

http://FieldGuide.mt.gov/detail\_IIPLE19090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

## Rheocrene Sallfly - Sweltsa lamba

http://FieldGuide.mt.gov/detail\_IIPLE19140.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

 $\textbf{Number of Observations} \colon 0$ 

### **General Description**

## Alpine Sallfly - Sweltsa occidens

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIPLE19160.aspx}}$ 



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

## Canadian Sallfly - Sweltsa revelstoka

http://FieldGuide.mt.gov/detail\_IIPLE19220.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### $\textbf{Number of Observations} \colon 0$

### **General Description**

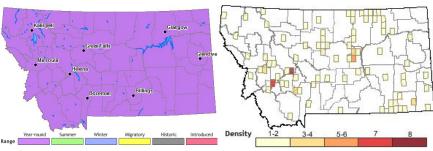
## Variegated Meadowhawk - Sympetrum corruptum

http://FieldGuide.mt.gov/detail\_IIODO61030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations : 138

#### Habitat

The habitat of the Variegated Meadowhawk includes marshy lakes and ponds, often saline and sand-bottomed, slow streams, vegetated pools of rivers, and springs, as well as temporary pools and rain puddles (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

## Saffron-winged Meadowhawk - Sympetrum costiferum

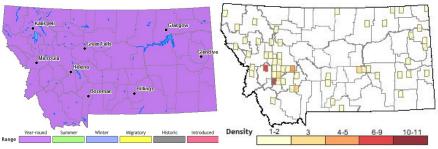
http://FieldGuide.mt.gov/detail\_IIODO61040.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 91

#### Habita

The prefered habitat of the Saffron-winged Meadowhawk is marshes, ponds, and lakes often with little vegetation, as well as bogs. This species can be found in saline, alkaline, or acidic wetland conditions (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

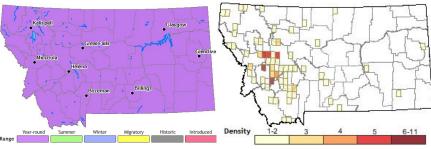
## Black Meadowhawk - Sympetrum danae

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IIODO61050.aspx}}$ 



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 120

## Habitat

The Black Meadowhawk prefers shallow lakes and ponds, fens, bogs, marshes, and occasionally saline water conditions as breeding habitat (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

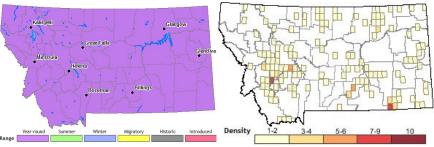
## Cherry-faced Meadowhawk - Sympetrum internum

http://FieldGuide.mt.gov/detail\_IIODO61070.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 220

## **General Description**

The cherry-faced meadowhawk is a small-sized, red dragonfly, each wing somewhat clear with reddish stigmas. This is Montana's most ubiquitous and widespread meadowhawk. Thorax dark red, abdomen brillant red on top, with some black triangles approaching from underneath. Occurs in many types of lentic habitats, including ponds and marshes that dry up in the summertime.

## Habitat

The preferred habitat of the Cherry-faced Meadowhawk is shallow ponds and lakes, often ones that dry up in summer, as well as marshes, bogs, and slow streams (Dunkle 2000, Paulson 2009).

## Red-veined Meadowhawk - Sympetrum madidum

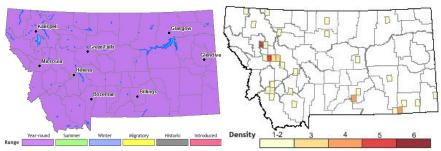
http://FieldGuide.mt.gov/detail\_IIODO61080.aspx



## **Potential Species of Concern**

Global Rank: G4 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 55$ 

The Red-veined Meadowhawk prefers shallow, often saline and usually temporary, marshy ponds that often dry up during the summer months, as well as marshy pools in slow streams (Dunkle 2000, Paulson 2009).

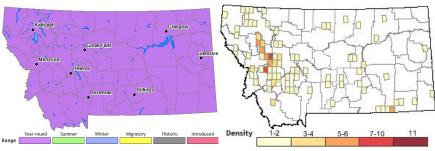
## White-faced Meadowhawk - Sympetrum obtrusum

http://FieldGuide.mt.gov/detail\_IIODO61090.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 180$ 

### Habitat

The preferred habitat of the White-faced Meadowhawk includes ponds, marshes, bogs and fens, both temporary and permanent, as well as lake edges and slow sluggish streams (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

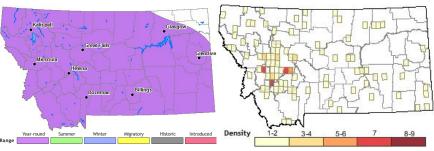
## Striped Meadowhawk - Sympetrum pallipes

http://FieldGuide.mt.gov/detail\_IIODO61110.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



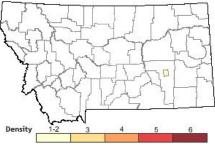
 $\textbf{Number of Observations} \colon 158$ 

### Habitat

Striped Meadowhawks prefer habitats that include shallow, temporarily flooded marshes, ponds, and lakes, as well as fens, bogs and vegetated streams (Dunkle 2000, Paulson 2009).

# Ruby Meadowhawk - Sympetrum rubicundulum <a href="http://FieldGuide.mt.gov/detail\_IIODO61120.aspx">http://FieldGuide.mt.gov/detail\_IIODO61120.aspx</a>





Number of Observations: 2

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

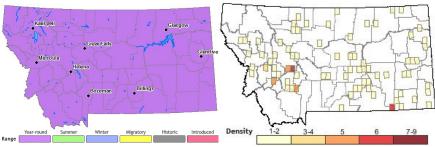
## Band-winged Meadowhawk - Sympetrum semicinctum

http://FieldGuide.mt.gov/detail\_IIODO61130.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 127

#### Habitat

The Band-winged Meadowhawk prefers open, shallow ponds and marshes, as well as bogs and fens with some water flow from spring-fed seepages, especially at stream overflows (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

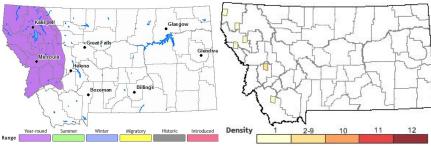
### Autumn Meadowhawk - Sympetrum vicinum

http://FieldGuide.mt.gov/detail\_IIODO61140.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



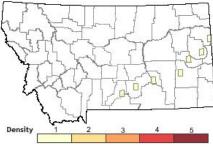
Number of Observations: 14

#### Habita

Autumn Meadowhawks select habitats that are permanent, but occasionally temporary, well-vegetated ponds, pools, lakes, marshes and bogs, as well as slow streams usually associated with forests (Dunkle 2000, Nikula et al. 2002, Paulson 2009).

### Pacific Willowfly - *Taenionema pacificum* <a href="http://FieldGuide.mt.gov/detail\_IIPLE0Z080.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0Z080.aspx</a>





Number of Observations: 7

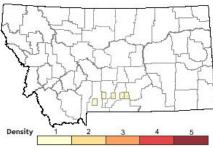
Global Rank: G5 State Rank: SNR

# Common Willowfly - Taenionema pallidum <a href="http://FieldGuide.mt.gov/detail\_IIPLE0Z090.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0Z090.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### **Uinta Willowfly -** *Taenionema uinta* <a href="http://FieldGuide.mt.gov/detail\_IIPLE0Z110.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0Z110.aspx</a>



Global Rank: G4 State Rank: SNR

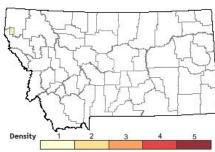
AGENCY STATUS USFWS: USFS: BLM:

### A Millipede - *Taiyutyla curvata* http://FieldGuide.mt.gov/detail\_ITUNI79010.aspx



### **Species of Concern**

Global Rank: G1G3 State Rank: S1S3



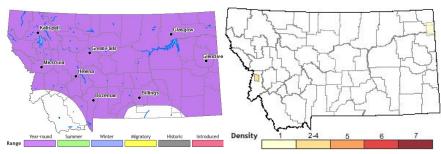
Number of Observations: 1

# Northern Cloudywing - Thorybes pylades http://FieldGuide.mt.gov/detail\_IILEP16020.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### European Skipper - Thymelicus lineola

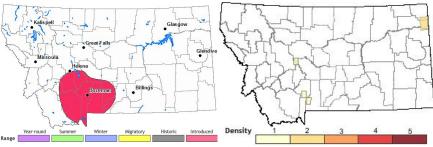
http://FieldGuide.mt.gov/detail\_IILEP60010.aspx



# AGENCY STATUS USFWS: USFS: BLM:

Global Rank: G5 State Rank: SNA

**Exotic Species** (not native to Montana)



#### $\textbf{Number of Observations} \colon 5$

### **General Description**

The wings of the European skipper (*Thymelicus lineola*) are brassy burnt orange. The upperside of both wings have black borders and black on the outer portions of the veins. The male forewing has a narrow black stigma. The wing span is about 25 - 29 mm (Opler, Lotts, and Naberhaus 2010).

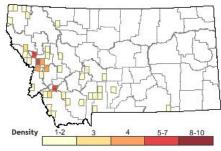
Open grassy places including meadows, hayfields, pastures, abandoned homesteads, grassy road edges (Opler et al. 2010).

### A Mayfly - Timpanoga hecuba

http://FieldGuide.mt.gov/detail\_IIEPH75040.aspx



Global Rank: G5 State Rank: SNR AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 84

### **General Description**

This species is associated with medium sized, moderate gradient, cool-coldwater streams and rivers with cobble riffles and some gravels and silted pool areas. Robust slightly flattened mayfly, with long hairs along the legs which collect with detritus making them look fuzzy and larger in situ.

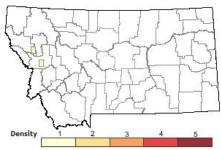
#### Habitat

This species is associated with medium sized, moderate gradient, cool-coldwater streams and rivers with cobble riffles and some gravels and silt pool areas..

### A Millipede - *Tingupa intergerina* <a href="http://FieldGuide.mt.gov/detail\_ITUNI75020.aspx">http://FieldGuide.mt.gov/detail\_ITUNI75020.aspx</a>



Global Rank: GNR State Rank: SNR

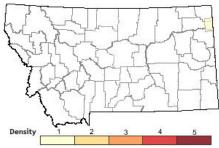


Number of Observations: 2

### A Lasiocampid Moth - Tolype velleda <a href="http://FieldGuide.mt.gov/detail\_IILEW05010.aspx">http://FieldGuide.mt.gov/detail\_IILEW05010.aspx</a>



Global Rank: G5 State Rank: SNR



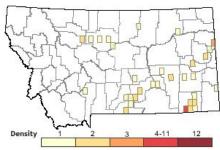
Number of Observations: 1

### A Mayfly - *Traverella albertana* http://FieldGuide.mt.gov/detail\_IIEPH68020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### A Caddisfly - Triaenodes tardus

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI2F200.aspx}}$ 



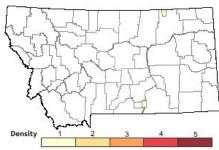
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

# A Tribelos Chironomid - *Tribelos jucundus* <a href="http://FieldGuide.mt.gov/detail\_IIDIP0M010.aspx">http://FieldGuide.mt.gov/detail\_IIDIP0M010.aspx</a>



Global Rank: GNR State Rank: S5



Number of Observations: 2

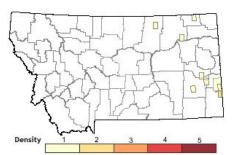
### A Water Boatman - Trichocorixa borealis

http://FieldGuide.mt.gov/detail\_IIHEMB6070.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:

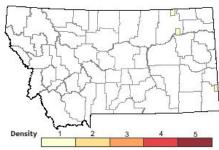


### A Water Boatman - Trichocorixa sexcincta

http://FieldGuide.mt.gov/detail\_IIHEMB6050.aspx



Global Rank: GNR State Rank: SNR



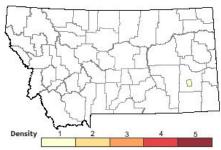
Number of Observations: 3

### A Water Boatman - Trichocorixa verticalis

http://FieldGuide.mt.gov/detail\_IIHEMB6060.aspx



Global Rank: GNR State Rank: S5



Number of Observations: 1

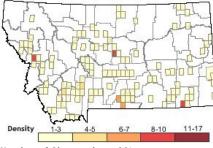
### A Mayfly - Tricorythodes explicatus

http://FieldGuide.mt.gov/detail\_IIEPH42120.aspx



AGENCY STATUS USFWS: USFS: BLM:

Global Rank: G5 State Rank: SNR



 $\textbf{Number of Observations} \colon 261$ 

### **General Description**

This is a very widespread and tolerant mayfly species with triangular operculate gills on the second abdominal segment. Large hatches of this prolific mayfly ("tricos") can be seen in the silted sections of the Missouri, Yellowstone and Clark Fork River Basins. In fact all major river systems provide habitat for this ubiquitous mayfly if silted pool areas provide habitat. This species of mayfly increases in abundance when streams become silted, dewatered and warmer.

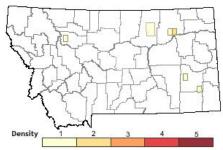
### Longtail Tadpole Shrimp - Triops longicaudatus

http://FieldGuide.mt.gov/detail\_ICBRA09010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 7

#### **General Description**

The longtail tadpole shrimp is the largest species of tadpole or fairy shrimp found in Montana. They can reach up to 2.5-3.5 inches (80 millimeters) in length. This species of tadpole shrimp (order Notostraca) is a member of the crustacean class Branchiopoda. Their large, hardened carapace (shell) makes them look like a fat tadpole swimming through the water or crawling along the bottom. They are important components of many freshwater and saline intermittent or temporary wetlands (Dodson and Frey 2001, Brendonk et al. 2008). These animals are especially common in seasonal wetlands, where populations are maintained by banks of resting eggs that may remain dormant and can survive drying periods of decades or longer (Brendonck 1996). Mostly found in the prairie ecoregion in habitats of isolated temporary or ephemeral wetlands that are fishless and dry up regularly.

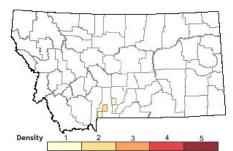
### Striped Sallfly - Triznaka signata

http://FieldGuide.mt.gov/detail\_IIPLE1A020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 4

#### **General Description**

This small, yellow-green stonefly is represented by the "Yellow Sally" dry fly for fly fisherman. It lives on the cobbles of streams and rivers for one year before emerging in the late spring or summer.

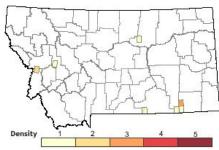
### Habitat .

This species occurs in creeks and rivers (Gaufin et al., 1972). We have reports from small streams to streams as large as the upper Yellowstone River.

### A Water Scavenger Beetle - *Tropisternus lateralis* <a href="http://FieldGuide.mt.gov/detail\_IICOLQ2020.aspx">http://FieldGuide.mt.gov/detail\_IICOLQ2020.aspx</a>



Global Rank: GNR State Rank: SNR



Number of Observations: 10

### A Bark Beetle - *Trypodendron betulae* <a href="http://FieldGuide.mt.gov/detail\_IICO197776.aspx">http://FieldGuide.mt.gov/detail\_IICO197776.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### A Bark beetle - *Trypodendron lineatum* <a href="http://FieldGuide.mt.gov/detail\_IICO197777.aspx">http://FieldGuide.mt.gov/detail\_IICO197777.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### A Bark Beetle - *Trypodendron retusum* <a href="http://FieldGuide.mt.gov/detail\_IICO197778.aspx">http://FieldGuide.mt.gov/detail\_IICO197778.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

### A Bark Beetle - *Trypodendron rufitarsis* <a href="http://FieldGuide.mt.gov/detail\_IICO197779.aspx">http://FieldGuide.mt.gov/detail\_IICO197779.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### A Bark Beetle - *Trypophloeus populi* <a href="http://FieldGuide.mt.gov/detail\_IICOLZQ010.aspx">http://FieldGuide.mt.gov/detail\_IICOLZQ010.aspx</a>



Global Rank: GNR State Rank: SU

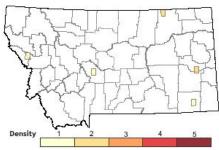
AGENCY STATUS USFWS: USFS: BLM:

### **Tubifex Worm - Tubifex tubifex**

http://FieldGuide.mt.gov/detail\_IAPOL11010.aspx



Global Rank: GNR State Rank: S5



Number of Observations: 7

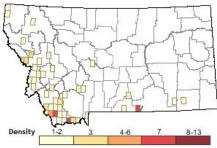
### A Tvetenian Chironomid - Tvetenia bavarica

http://FieldGuide.mt.gov/detail\_IIDIP0L010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



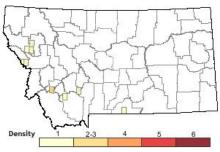
### A Tvetenian Chironomid - Tvetenia vitracies

http://FieldGuide.mt.gov/detail\_IIDIP0L020.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



### Lyre Mantleslug - *Udosarx lyrata* <a href="http://FieldGuide.mt.gov/detail\_IMGASB7010.aspx">http://FieldGuide.mt.gov/detail\_IMGASB7010.aspx</a>



 $\textbf{Number of Observations} \colon 19$ 

### **Species of Concern**

Global Rank: G2 State Rank: S1

### Lyre Mantleslug - *Udosarx lyrata lyrata* <a href="http://FieldGuide.mt.gov/detail\_IMGASB7011.aspx">http://FieldGuide.mt.gov/detail\_IMGASB7011.aspx</a>



Global Rank: G2T2 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:

### Russell Mantleslug - Udosarx lyrata russelli

http://FieldGuide.mt.gov/detail\_IMGASB7012.aspx



Global Rank: G2T1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

#### Habitat

Found in moist mixed-conifer subalpine forest, preferably in moist valleys, ravines, and talus sites (Webb 1959, Frest and Johannes 1995). Also found in riparian areas with a canopy of *Picea engelmannii, Pseudotsuga menziesii, Populus* and *Alnus* (W. Leonard personal communication). The subspecies *U. I. russelli* was found in south-facing open *Pinus ponderosa* forest with little undergrowth (Russell and Webb 1980). At all sites, individuals were located on the undersurfaces of fallen logs or within nearly completely rotten logs, and under rocks. Animals were active in wet and cold (10 [50conditions (Webb 1959, Russell and Webb 1980); captive animals preferred temperatures <21(70

### Columbian Snowfly - Utacapnia columbiana

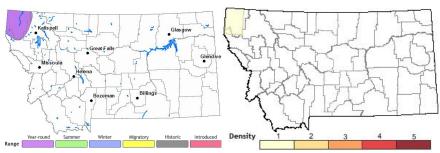
http://FieldGuide.mt.gov/detail\_IIPLE09010.aspx



#### **Species of Concern**

Global Rank: G4 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 1

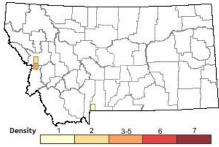
#### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

### **Distinctive Snowfly - Utacapnia distincta**

http://FieldGuide.mt.gov/detail\_IIPLE09020.aspx





#### Number of Observations: 8

### **General Description**

Species within the Capnildae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

Global Rank: G4 State Rank: SNR

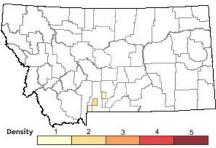
### **Gunnison Snowfly - Utacapnia poda**

http://FieldGuide.mt.gov/detail\_IIPLE09080.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



### Number of Observations: 4

#### **General Description**

Species within the Capniidae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region, 25 species occur in Montana. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

### Yellowstone Snowfly - Utacapnia trava

http://FieldGuide.mt.gov/detail\_IIPLE09110.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

#### Number of Observations: 0

#### **General Description**

Species within the Capniidae are small winter stoneflies. This family is one of the largest families in the order Plecoptera, containing some 300 species distributed throughout the Holarctic region. As their name implies these species are generally cold-water stenotherms and hatch in late-winter through early spring. The adults emerging in the winter are often found walking around on the snow. Their closest relatives are the rolled-winged stoneflies (Leuctridae). Many species are endemic to small ranges, perhaps due to the family's tendency to evolve tolerance for cold (isolating populations in mountain valleys) and winglessness (inhibiting dispersal).

### Black Salifly - Utaperla sopladora

http://FieldGuide.mt.gov/detail\_IIPLE1D020.aspx



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

#### $\textbf{Number of Observations} \colon 0$

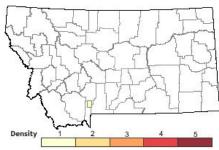
#### **General Description**

Nymphs and adults within the Chloroperliidae are small green and yellow stoneflies. Known to fly-fisherman as "little yellows", "little greens" and "Yellow Sallies". This family is well represented in Montana with 26 species, one of the larger families in the order Plecoptera, containing some 100 species distributed throughout the Holarctic region of North America. The adults are emerging in late spring and throughout summer.

## Indecisive Vallonia - Vallonia albula http://FieldGuide.mt.gov/detail\_IMGAS22010.aspx



Global Rank: G4Q State Rank: SNR



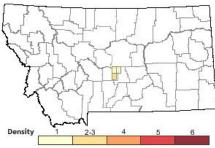
Number of Observations: 1

### Costate Vallonia - Vallonia costata

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IMGAS22020.aspx}}$ 



Global Rank: G5 State Rank: SNR



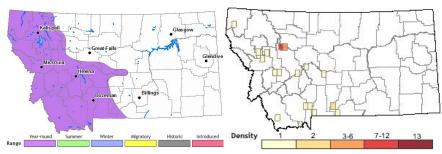
Number of Observations: 5

## **Silky Vallonia -** *Vallonia cyclophorella* <a href="http://FieldGuide.mt.gov/detail\_IMGAS22030.aspx">http://FieldGuide.mt.gov/detail\_IMGAS22030.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

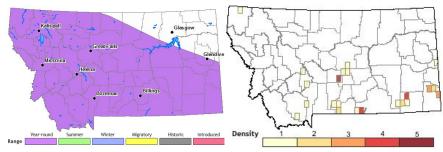


## Multirib Vallonia - *Vallonia gracilicosta* <a href="http://FieldGuide.mt.gov/detail\_IMGAS22050.aspx">http://FieldGuide.mt.gov/detail\_IMGAS22050.aspx</a>



Global Rank: G5Q State Rank: S4S5

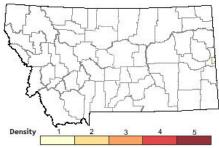
AGENCY STATUS USFWS: USFS: BLM:



## Thin-lip Vallonia - Vallonia perspectiva http://FieldGuide.mt.gov/detail\_IMGAS22070.aspx



Global Rank: G4G5 State Rank: SNR



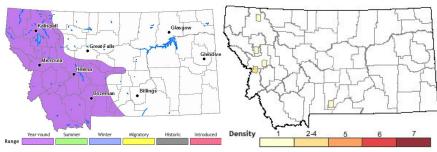
Number of Observations: 1

## **Lovely Vallonia -** *Vallonia pulchella*<a href="http://FieldGuide.mt.gov/detail\_IMGAS22080.aspx">http://FieldGuide.mt.gov/detail\_IMGAS22080.aspx</a>



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

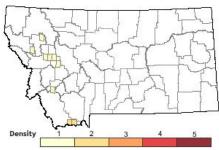


## Glossy Valvata - Valvata humeralis http://FieldGuide.mt.gov/detail\_IMGASE5020.aspx



Global Rank: G5Q State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

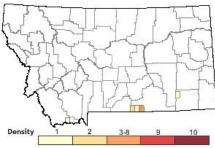


## Fringed Valvata - Valvata lewisi http://FieldGuide.mt.gov/detail\_IMGASE5030.aspx



Global Rank: G5 State Rank: SNR

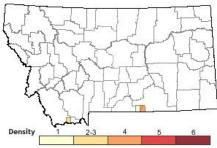
AGENCY STATUS USFWS: USFS: BLM:



## Mossy Valvata - Valvata sincera http://FieldGuide.mt.gov/detail\_IMGASE5070.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 8

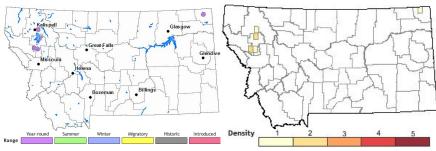
### Threeridge Valvata - Valvata tricarinata http://FieldGuide.mt.gov/detail\_IMGASE5080.aspx



#### **Potential Species of Concern**

Global Rank: G5 State Rank: S2S3

AGENCY STATUS USFWS: USFS: BLM:



## West Coast Lady - Vanessa annabella http://FieldGuide.mt.gov/detail\_IILEPK7030.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 9$ 

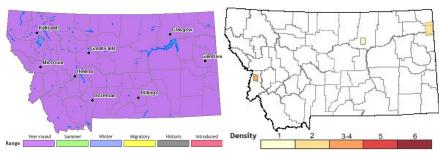
### Red Admiral - Vanessa atalanta

http://FieldGuide.mt.gov/detail\_IILEPK7040.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



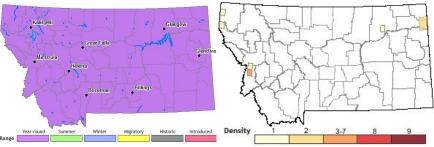
### Painted Lady - Vanessa cardui

http://FieldGuide.mt.gov/detail\_IILEPK7020.aspx



Global Rank: G5 State Rank: S5 AGENCY STATUS

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 13

#### **General Description**

The upperside of the Painted Lady (*Vanessa cardui*) is orange-brown with darker wing bases. The forewing has a black apex patch and white bar on leading edge. The hindwing has a submarginal row of 5 small black spots that sometimes have blue scales. The underside has a black, brown, and gray pattern with 4 small submarginal eyespots. The wing span is about 51 - 73 mm (Opler et al. 2010).

#### Habitat .

Almost everywhere, especially in open or disturbed areas including gardens, old fields, dunes (Opler et al. 2010).

## American Lady - Vanessa virginiensis http://FieldGuide.mt.gov/detail\_IILEPK7010.aspx



Global Rank: G5 State Rank: SNA

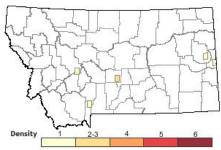
AGENCY STATUS USFWS: USFS: BLM:



## **Cylindrical Vertigo - Vertigo binneyana** http://FieldGuide.mt.gov/detail\_IMGAS20070.aspx



Global Rank: G1 State Rank: SNR

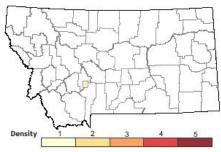


Number of Observations: 7

## Mitered Vertigo - Vertigo concinnula http://FieldGuide.mt.gov/detail\_IMGAS20120.aspx



Global Rank: G4 State Rank: SNR



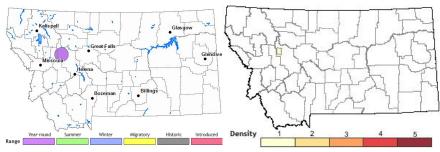
Number of Observations: 1

## Crested Vertigo - Vertigo cristata http://FieldGuide.mt.gov/detail\_IMGAS20450.aspx



Global Rank: G5 State Rank: SNR

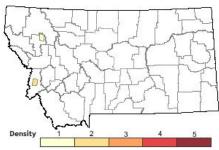
AGENCY STATUS USFWS: USFS: BLM:



## **Tapered Vertigo - Vertigo elatior** http://FieldGuide.mt.gov/detail\_IMGAS20140.aspx



Global Rank: G5 State Rank: SNR



Number of Observations: 3

## Variable Vertigo - *Vertigo gouldii* http://FieldGuide.mt.gov/detail\_IMGAS20150.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

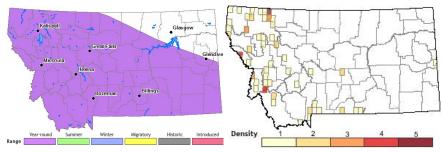


## Cross Vertigo - *Vertigo modesta* http://FieldGuide.mt.gov/detail\_IMGAS20210.aspx



Global Rank: G5 State Rank: S4S5

AGENCY STATUS USFWS: USFS: BLM:

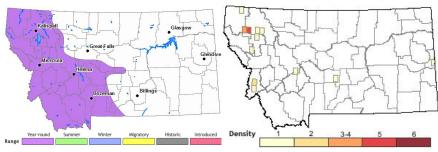


## Ovate Vertigo - Vertigo ovata http://FieldGuide.mt.gov/detail\_IMGAS20250.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

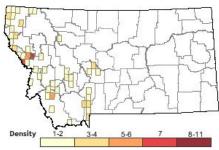


## Cataract Forestfly - Visoka cataractae <a href="http://FieldGuide.mt.gov/detail\_IIPLE0T010.aspx">http://FieldGuide.mt.gov/detail\_IIPLE0T010.aspx</a>



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

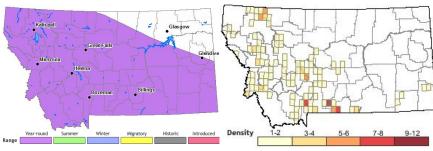


## Western Glass-snail - Vitrina pellucida http://FieldGuide.mt.gov/detail\_IMGAS86030.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



## A Caddisfly - Wormaldia gabriella http://FieldGuide.mt.gov/detail\_IITRI65610.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Caddisfly - Wormaldia occidea

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI65620.aspx}}$ 



Global Rank: G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Eastern Heath Snail - Xerolenta obvia

http://FieldGuide.mt.gov/detail\_IMGASE0040.aspx



## Density

#### Number of Observations: 1

#### **General Description**

The Eastern Heath Snail is slightly smaller than a dime in diameter and is white with dark brown spiral bands. Native species of the same general appearance do not typically climb vegetation and other upright objects or aggregate in large numbers the way this species does.

#### Habitat .

The snail prefers dry grassy areas and survives long periods of dry conditions by withdrawing into its shell and sealing the opening with a mucous membrane.

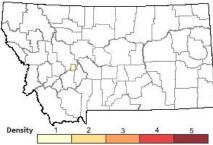
#### **Exotic Species** (not native to Montana)

Global Rank: G5 State Rank: SNA

### A Noctuid Moth - Xestia mustelina

http://FieldGuide.mt.gov/detail\_IILEYLN470.aspx





### Number of Observations: 1

### **General Description**

The forewing of Xestia mustelina is pink-gray with very large gray discal spots outlined in black. The wingspan is about 36 mm (USGS 2006). The hindwings are pale smoky brown (Davis 2007).

#### Habitat .

X. mustelina is common and widely distributed in wet conifer forests in the Pacific West and in the northern Rocky Mountains (USGS 2006).

Global Rank: GNR State Rank: SNR

## A Bark Beetle - *Xyleborus intrusus* http://FieldGuide.mt.gov/detail\_IICOL7J010.aspx



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

## A Bark Beetle - *Xylechinus montanus* <a href="http://FieldGuide.mt.gov/detail\_IICOL7G020.aspx">http://FieldGuide.mt.gov/detail\_IICOL7G020.aspx</a>



Global Rank: GNR State Rank: SU

AGENCY STATUS USFWS: USFS: BLM:

 $\textbf{Number of Observations} \colon 0$ 

### A Noctuid Moth - Xylena brucei

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IILEYFA050.aspx}}$ 



# Density 1 2 3 4 5

#### Number of Observations: 1

### **General Description**

The Xylena brucei forewing is gray with large discal spots (USGS 2006).

#### Habitat \_

X. brucei occurs in ponderosa pine forests (USGS 2006).

Global Rank: GNR State Rank: SNR

### A Caddisfly - Ylodes frontalis

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRI66820.aspx}}$ 



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### A Caddisfly - Ylodes reuteri

 $\underline{\text{http://FieldGuide.mt.gov/detail\_IITRIDA030.aspx}}$ 



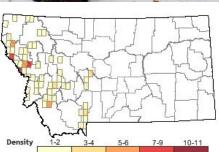
Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

### Least Roachfly - Yoraperla brevis

http://FieldGuide.mt.gov/detail\_IIPLE1K010.aspx





Number of Observations: 142

#### **General Description**

This is the most common genus of the family Peltoperlidae in the Rocky Mountains. Yoraperla species are found in headwater flowing water habitats in the northern Rocky Mountains and Y. brevis is the most common species in the whole group The genus is distinguished by the presence of two pairs of cervical gills, one on the inside and one on the outside of the lateral cervical sclerites Yoraperla species are abundant in accumulations of leaf material and probably act as shredders of allochthonous material in heterotrophic lotic ecosystems.

#### Habitat .

This species occurs in small high-gradient creeks and streams near their headwater sources (Baumann et al. 1977). Nymphs were found in large woody debris and mossy cobbles. Merritt and Cummins (1996) describe Yoraperla trophic relationships as shredders (large organic detritus, plant materials).

Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:

### Sheathed Slug - Zacoleus idahoensis

http://FieldGuide.mt.gov/detail\_IMGAS65010.aspx

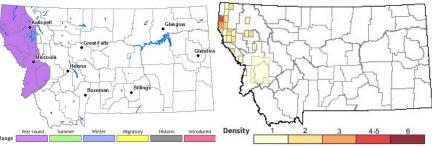


#### **Species of Concern**

Global Rank: G3G4 State Rank: S2S3

AGENCY STATUS USFWS: USFS:

BLM:



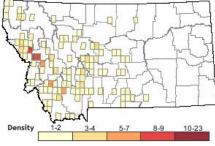
Number of Observations: 37

#### Habitat

Habitat descriptions are limited. Most occurrences in Idaho are in moist microsites in relatively intact *Pseudotsuga menziesii*, *Pinus ponderosa*, and *Picea engelmannii* forests (Frest and Johannes 1995) in moist valleys, ravines, and talus on both north- and south-facing slopes. Pilsbry (1948) lists collections made in meadows and cedar swamps, white pine stands, spruce valleys, rockslides, and near springs. *Populus* and *Alnus* are present at several north Idaho locations (H. Reise personal communication). Rocky substrates include sedimentary, igneous and metamorphic types; the Prospect Creek, Sanders County, Montana site is described as composed of calcareous shales (Pilsbry 1948).

## A Riffle Beetle - Zaitzevia parvula http://FieldGuide.mt.gov/detail\_IICOL47010.aspx





Number of Observations: 258

Global Rank: GNR State Rank: S5

### Warm Spring Zaitzevian Riffle Beetle - Zaitzevia thermae

http://FieldGuide.mt.gov/detail\_IICOL47020.aspx



#### Number of Observations: 9

#### Habitat

Requires surface flowing warm water with temperatures between 60-84 deg. F; commonly found securely attached under rocks or clinging to watercress (Kindschi 1994). These beetles feed on small pieces of algae and diatoms that they scrape from submerged rocks on the gravel bottom and among vegetation. Both Z. thermae and M. browni require warm and flowing surface water with temperatures of 60 to 84° F. They are endemic to Bridger Creek Warm Springs near Bozeman, MT.

#### **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS:

BLM:

# **Common Forestfly - Zapada cinctipes**

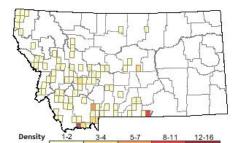
http://FieldGuide.mt.gov/detail\_IIPLE0U020.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS:

BLM:



Number of Observations: 163

#### **General Description**

This is the most common genus of the family Nemouridae in the Rocky Mountains. Zapada species are found in almost every flowing water habitat in the northern Rocky Mountains and Z. cinctipes is the most vagile species in the whole group The genus is distinguished by the presence of two pairs of cervical gills, one on the inside and one on the outside of the lateral cervical sclerites Zapada species are abundant in accumulations of leaf material and probably act as shredders of allochthonous material in heterotrophic lotic ecosystems.

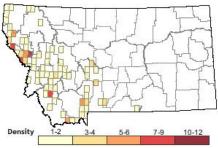
## Columbian Forestfly - Zapada columbiana

http://FieldGuide.mt.gov/detail\_IIPLE0U030.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations : 193

#### Habitat

The larvae of this species are found in small-medium, high gradient mountain streams (Newell and Minshall 1978), and are indicators of the Pristine Mountain Stream Ecological System (Stagliano 2005). Most Nemouridae species are shredders or collector-gatherers utilizing coarse plant materials (Merritt and Cummins 1996).

## Cordilleran Forestfly - Zapada cordillera

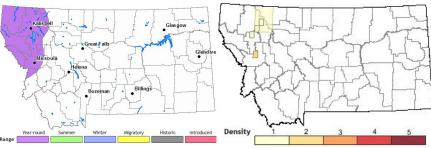
http://FieldGuide.mt.gov/detail\_IIPLE0U040.aspx



### **Species of Concern**

Global Rank: G3 State Rank: S2

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 6

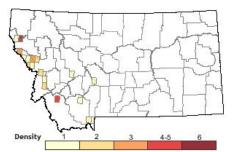
This species occurs in spring-influenced creeks and small streams (Baumann et al. 1977; NatureServe 2006). The morphology of the mouthparts suggests that Zapada cordillera is well-suited for shredding plant materials, thus trophic relationships would include being shredders and collectors-gatherers (detritus, CPOM) (Merritt & Cummins 1996).

# Frigid Forestfly - Zapada frigida http://FieldGuide.mt.gov/detail\_IIPLE0U050.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 35$ 

The larvae of this species are found in small, high gradient mountain streams (Newell and Minshall 1978), and are indicators of the Pristine Mountain Stream Ecological System (Stagliano 2005). Most Nemouridae species are shredders or collector-gatherers utilizing coarse plant materials (Merritt and Cummins 1996).

# Western Glacier Stonefly - Zapada glacier

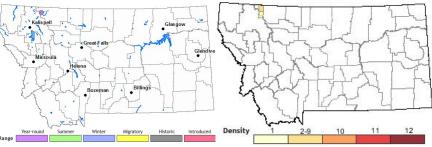
http://FieldGuide.mt.gov/detail\_IIPLE0U060.aspx



#### **Species of Concern**

Global Rank: G1 State Rank: S1

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 10

#### **General Description**

The western Glacier Forestfly is a small, dark colored stonefly reported only within the habitats of glacial-fed streams in Glacier National Park. This species is one of 7 species of globally-rare insects within Glacier National Park that will be adversely affected when the glaciers have completely melted.

### Habitat

This species occurs in steep (precipitous) glacial-influenced streams (Baumann et al. 1977; NatureServe 2006).

# Intermountain Forestfly - Zapada haysi http://FieldGuide.mt.gov/detail\_IIPLE0U070.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:

Number of Observations: 0

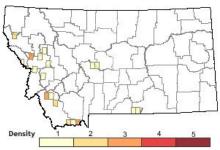
## Oregon Forestfly - Zapada oregonensis

http://FieldGuide.mt.gov/detail\_IIPLE0U090.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 30

#### **General Description**

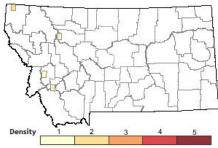
Male four millimeters long. Female four to five millimeters long. Both sexes brachypterous. General color light brown. Four cervical gills, each composed of two compressed filaments which are branched once or twice beyond the base; length of each gill about six times its width at the base. Head wider than prontum, dark brown expect for a paler area beyond the anterior ocellus. Pronotum about as wide as long, narrowed in width posteriorly and with the angles broadly rounded, generally dark with light lateral and posterior margins. Forewing reaching to about the middle of the metanotum, high wings slightly shorter. Antennae composed of 27-32 segments, equal to or slightly greater than the length of the body (Denning 1954).

# A Zavrelian Chironomid - Zavrelia pentatoma http://FieldGuide.mt.gov/detail\_IIDIP0K010.aspx



Global Rank: GNR State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



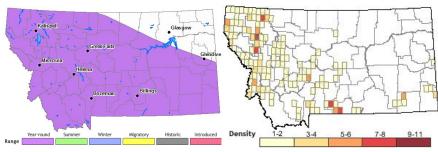
Number of Observations: 5

# Quick Gloss - Zonitoides arboreus http://FieldGuide.mt.gov/detail\_IMGAS85010.aspx



Global Rank: G5 State Rank: S5

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 314

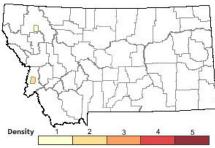
## Black Gloss - Zonitoides nitidus

http://FieldGuide.mt.gov/detail\_IMGAS85060.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



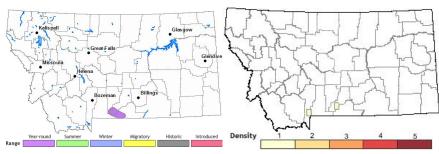
Number of Observations: 3

# Boreal Top - Zoogenetes harpa http://FieldGuide.mt.gov/detail\_IMGAS23010.aspx



Global Rank: G5 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



Number of Observations: 2

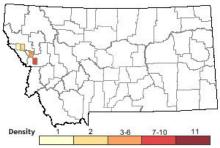
## A Caddisfly - Zumatrichia notosa

http://FieldGuide.mt.gov/detail\_IITRID9010.aspx



Global Rank: G2G4 State Rank: SNR

AGENCY STATUS USFWS: USFS: BLM:



 $\textbf{Number of Observations} \colon 19$ 

#### Habitat

Hydroptilid larvae occur in still and flowing freshwaters, generally on upper surfaces of rocks and boulders or amongst filamentous green algae or on macrophytes. Some species can be found in the splash zone of waterfalls or cascades, often aggregating in crevices amongst algal, liverwort and moss growths.